ERIC REPORT RESUME

ED 010 095 1-06-67 24 (REV)

INSIGHTS GAINED AS A RESULT OF A HIGH SCHOOL SOCIAL STUDIES COURSE.

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CRP-S-279
BR-5-8035
- -66
EDRS PRICE MF-$0.18 HC-$5.08 127P.

*HIGH SCHOOL STUDENTS, *SOCIAL STUDIES, *ANTHROPOLOGY, WORLD AFFAIRS,
TESTING, *SELF-CONCEPT, SOCIAL VALUES, *SOCIAL ATTITUDES,
CULTURAL AWARENESS, CHICAGO, ILLINOIS

A STUDY ATTEMPTED TO DETERMINE WHETHER HIGH SCHOOL STUDENTS WHO HAVE GAINED KNOWLEDGE AND UNDERSTANDING OF CONCEPTS IN ANTHROPOLOGY WOULD--(1) ACHIEVE GREATER SELF-INSIGHT, (2) BECOME LESS ETHNOCENTRIC IN THEIR ATTITUDES TOWARD OTHERS, AND (3) INCREASE THEIR ABILITY TO THINK CRITICALLY ABOUT SOCIAL PROBLEMS. A 1-YEAR EXPERIMENTAL COURSE ON WORLD CULTURES PRESENTED LEARNING EXPERIENCES USING INTELLECTUAL AND EMOTIONAL STIMULI FOR STUDENTS TO TAKE THE ROLES OR ATTITUDES OF OTHER ADOLESCENTS IN OTHER CULTURES. ONE EXPERIMENTAL AND TWO CONTROL GROUPS OF STUDENTS RECEIVED A BATTERY OF PRE- AND POST-EXPERIMENT TESTS. RESULTS SHOWED THAT THE EXPERIMENTAL GROUP GAINED IN ACHIEVING LESS ETHNOCENTRISM AND THAT OTHER HYPOTHESES WERE NOT PROVEN. OTHER IMPLICATIONS WERE DISCUSSED. (JM)

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INSIGHTS GAINED AS A RESULT OF A HIGH SCHOOL SOCIAL STUDIES COURSE

Cooperative Research Small Contract

Project S-279
5 - 8035

Ida Bass Lalor
The University of Chicago
Chicago, Illinois

1966

The research reported herein was supported by the Cooperative Research Program of the Office of Education, U.S. Department of Health, Education, and Welfare.

". . . Our vision must be of the open society fulfilling itself in an open world. This we can love. This gives our country its universal validity. This is a patriotism which sets no limits to the capacity of our country to act as the organizing principle of wider and wider associations, until in some way not yet foreseen we can embrace the family of man."

--Adlai E. Stevenson, "The Hard
Kind of Patriotism"
Harper's Magazine, July 1963

ACKNOWLEDGEMENTS

The writer would like to express her appreciation to the members of her advisory committee, Dr. Maurice L. Hartung, chairman, Doctors Jacob W. Getzels, John R. Ginther, and Kenneth J. Rehage for their guidance in the preparation of this dissertation. She also wishes to thank Dr. Harold B. Dunkel for his assistance in the formulation of the theoretical basis for this study.

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CHAPTER I

THE BACKGROUND OF THE STUDY

One who examines a range of high school courses of study in the social studies must be impressed by the fact that the most common objectives reflect the awareness of the complicated social, economic and political problems which young people face today.[1] In addition to helping students become aware of these problems, many teachers seek to develop in their students an ability to analyze and understand such problems and to evaluate intelligently the solutions that may be offered. The statement and restatement of these objectives have been matched by continuous recommendations for expanding the social studies curriculum, for alternative patterns of organization, for experimentation with methodology. Despite the fact that social studies programs have expanded to include instruction related to home and family living, personal health, driver and safety education, until this decade the high school curriculum makers have not seen the need for or have been unable to include in the curriculum the study of cultural anthropology per se or to make use of its concepts and insights. "Culture lag" may to some extent explain this omission or perhaps the failure in applying anthropological concepts generally to our culture may be attributable to the history of the growth of the science itself. Nevertheless, if the social studies teachers are in agreement, as they appear to be, concerning the above stated objectives and if anthropology is the science that describes and analyzes cultures and processes of culture so that a society can better understand and control its own culture, then it would seem appropriate to include cultural anthropology in the high school curriculum and to set up the conditions which would permit us to make observations concerning the effectiveness of such content in achieving the desired goals.

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[1] A recent statement of these objectives can be found in Social Education, October, 1962, "The Role of the Social Studies" prepared for the National Council for the Social Studies, XXVI, No. 6, 315.

This experimental study was undertaken to test the hypothesis that a high school social studies course based on anthropological concepts will increase a student's ability to think critically about social problems and to test hypotheses concerning the relationships between this ability to solve social problems and attitudes about oneself and others.

One should not infer from this statement of the problem that the desired behaviors are not already being achieved in varying degrees through existing courses in social studies. The study seeks to determine if there are more efficient and economical ways of achieving these ends than are currently being employed.

Throughout history the development of signs, symbols, and signals has enabled mankind to evolve a complex society. Thinking has progressed remarkably as man has learned to use symbolism and signs to control, to discipline, to extend his trains of thought. For reasoning purposes a means of expressing the contents of a paragraph in a single concept and particularly a concept which is unbiased towards any particular context may be a contribution to clarity of thought. Knowledge of the contents of a course in cultural anthropology, the signs and symbols, and the language of this area should enable the student to face many of life's persistent problems more efficiently and effectively. It should in any case provide the student with the opportunity to acquire the means for organizing his experiences within an expanded frame of reference and to see himself as a participant in a society which can be self-regulating and self-repairing.

The social psychology of George H. Mead, the classical study on the authoritarian personality by Adorno, the studies on prejudice by Allport, Bettelheim and Janowitz, and the investigations concerning rigidity of thinking, intolerance of ambiguities by Frenkel-Brunswik, Rokeach and others have provided the theoretical basis for the design of this study.

The first two parts of Hypothesis I concerning attitudes toward self and others, namely that members of an experimental group (those who have had a course based on cultural anthropology) will show significantly greater gains than members of the control groups (those who have had a conventional course in world history) in achieving self-awareness and in their acceptance of others were derived from Mead.

The concept "self" is defined as an object distinct from the physiological organism which arises in social experience and is essentially a social structure.

The concept "other" is defined as any object or set of objects, whether animate or inanimate, human or animal, towards which the self acts or to which the self responds socially.

In this study the Gross Self-Appraisal Scale was used to measure the extent of "self"-awareness, and the Inventory of Beliefs was used to measure the extent of sensitivity to "others."

According to Mead, both the human mind and the self arise through the social process. It is through the mechanisms of language that a common response may be called out in both the "self" and the "other." Through the use of significant symbols a person can "take the role of another" and thereby regulate his own conduct. Insofar as one can take the role of the other, he can, as it were, look back at himself from that perspective and so become an object to himself. Through the internalization of the social process of communication a person gains the ability to think reflectively and thereby to become an object to himself. This is the process through which the biologic individual becomes a self-conscious man. To extend the argument, another of Mead's concepts, that of the "generalized other" becomes pertinent.

To illustrate the concept of the "generalized other," Mead makes the distinction between play and the game. In play, a person takes the role of another; in the game, the different roles which the child takes have a relationship to one another. The child must "have the responses of each position involved in his own position. He must know what everyone else is going to do in order to carry out his own play. He has to take all of these roles."[1] The child has to begin to develop an attitude in which he is everyone else on his team, a "generalized other," in terms of which he sees his own place. Looked at from the standpoint of the act, the "generalized other" is the act of role-taking in its universality, the universalization of the process of role-taking.

---

[1] George H. Mead, Mind, Self, and Society (Chicago: University of Chicago Press, 1934), p. 151.

> This getting of the broad activities of any given social whole or organized society as such within the experiential field of the individuals involved or included in that whole is, in other words, the essential basis and prerequisite of the fullest development of that individual's self: only insofar as he takes the attitudes of the organized social group to which he belongs toward the organized, cooperative social activity or set of such activities in which that group as such is engaged, does he develop a complete self or possess the sort of self he has developed.[1]

If the self is capable of taking the attitudes of others into itself through the language process and if through this process it "becomes" the others, then the values of the others can become its own.

If the self has extensive, significant multi-cultural experience, if the self assumes the role of the "generalized other" for each of the cultures experienced, then its values can transcend the context of any particular culture by becoming values relevant to the social process itself. In its final developmental stage, one might anticipate a conscious identification with and participation in the society of man as such.

The following seven propositions summarize the assumptions underlying Hypothesis I:

(1) Each person is born within a culture that is composed of ideas, attitudes and behaviors with respect to each of its components.

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[1] _Ibid_.

(2) Each person is born with drives he strives to satisfy.

(3) A person strives to satisfy his drives within this cultural framework.

(4) The "self" evolves through the process of interaction between the person and the cultural components.

(5) The limits of the concept of self and of the self in relation to others are determined by the dimensions of the cultural experience.

(6) Multi-cultural experience may promote the extension of the limits of the self-concept.

(7) A course in cultural anthropology will provide the stimuli for facilitating or setting into motion the reflexive process described by Mead.

Another hypothesis, that the experimental group will show significantly greater gains than the control groups in their ability to think critically about social problems, is based upon the assumption that there is no dichotomous distinction between cognitive and emotional processes. It is assumed that every emotion has its cognitive counterpart, that if we know something about the way in which a person relates to himself, and to the world of people, we may also be able to say in what way he relates himself to the world of ideas.

In recent years there have appeared a number of investigations on the relation between social attitudes and cognitive functioning.[1] Some major findings that came out of these studies are that persons who are high in ethnic prejudice and/or authoritarianism, as compared with persons who are low, are more rigid in their problem-solving behavior, more concrete in their thinking, and more narrow in their grasp of a particular subject; they also have a greater tendency to premature closure in their perceptual processes and to distortions in memory, and a greater tendency to be intolerant of ambiguity.[1]

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[1] Else Frenkel-Brunswik, "Dynamic and Cognitive Categorization of Qualitative Material," Journal of Psychology, XXV (April,

In his book, The Open and Closed Mind, Rokeach outlines a theory about the characteristics that may be usefully employed to describe all belief systems. He views all systems as having three major dimensions: a belief-disbelief dimension, a central-peripheral dimension, and a time-perspective dimension. Each of these dimensions has additional attributes which may be tied to these various dimensions to produce a mind which, in its totality, can be described as varying in the degree to which it is an open or closed mind. Rokeach assumes that

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1948, 253-277; Else Frenkel-Brunswik, "A Study of Prejudice in Children," Human Relations, I, No. 3 (1948), 295-306; Else Frenkel-Brunswik, "Intolerance of Ambiguity as an Emotional and Perceptual Personality Variable," Journal of Personality, XVIII (September, 1949), 108-143; Bernard Kutner, "Patterns of Mental Functioning Associated with Prejudice in Children," Psychological Monographs, LXXII, No. 7 (Whole No. 460) (1958); Patricia O'Connor, "Ethnocentrism, 'Intolerance of Ambiguity,' and Abstract Reasoning Ability," Journal of Abnormal and Social Psychology, XLVII (April, 1952), 526-530; Milton Rokeach, "Generalized Mental Rigidity as a Factor in Ethnocentrism," Journal of Abnormal and Social Psychology, XLIII (July, 1948), 259-278; Milton Rokeach, "'Narrow-mindedness' and Personality," Journal of Personality, XX (December, 1951), 234-251; Milton Rokeach, "The Nature and Meaning of Dogmatism," Psychological Review, LXI (May, 1954), 194-204.

[1] It is this investigator's opinion, however, that general rigidity and concrete thinking are not necessarily related. An attitude toward a discrete object may condition attitudes toward general forms of the same object and attitudes toward these general categories may condition one's feelings for or against even higher levels of abstractions. In other words, rigidity or mental set need not restrict one to the concrete.

> . . . in any situation in which a person must act, there are certain characteristics of the situation that point to the appropriate action to be taken. If the person reacts in terms of such relevant characteristics, his response should be correct, or appropriate. The same situation also contains irrelevant factors, not related to the inner structure or requirements of the situation. To the extent that response depends on such irrelevant factors, it should be unintelligent or inappropriate. Every person, then, must be able to evaluate adequately both the relevant and irrelevant information he receives from every situation. This leads us to suggest a basic characteristic that defines the extent to which a person's system is open or closed; namely, the extent to which the person can receive, evaluate, and act on relevant information received from the outside on its own intrinsic merits, unencumbered by irrelevant factors in the situation arising from within the person or from the outside.[1]

"A Synthetic Study of College Freshmen," chapter x in Methods in Personality Assessment by Stern, Stein and Bloom, substantiates the capacity of an instrument called the "Inventory of Beliefs" to differentiate three types of students. One of the synthetic models used as the basis for the development of the objective measurement instrument, the Inventory of Beliefs, was consistent with the previously referred to authoritarian character of Adorno et al. and "may be characterized in terms of depersonalized and codified social relationships, pervasive acceptance of authority as absolute, inhibition and denial of impulses, and rigid orderliness and conformity in behavior."[2] Two personality syndromes are described and contrasted: -- the stereotypy or S syndrome and the non-stereopathy or N syndrome. The authors characterized the non-stereopathic individual as one who "seemed to be represented by highly personalized and individualized social relationships, pervasive rejection of authority figures, spontaneous and acceptant impulse life, and non-conforming flexibility in behavior."[1]

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[1] Milton Rokeach, The Open and Closed Mind (New York: Basic Books, Inc., 1960), p. 57.

[2] George G. Stern, Morris I. Stein and Benjamin S. Bloom, Methods in Personality Assessment (Glencoe, Ill.: The Free Press, 1956), p. 189.

Moving with Rokeach into the cognitive dimension, we should expect that "the more open one's belief system, the more should evaluating and acting on information proceed independently on its own merits, in accord with the inner structural requirements of the situation. Also, the more open the belief system, the more should the person be governed in his actions by internal self-actualizing forces and the less by irrational inner forces."[2]

It is not anticipated that there will be a one to one correspondence between performances on the Inventory of Beliefs and a Social Problems Test (another of the dependent variables) since at least one other factor has been theorized to be operative. If the relationship is to exist with any consistency then self-awareness must intervene. More than likely we will find students who get high scores on the Inventory of Beliefs who do not perform comparably on the Social Problems Test. They may be representative of Rokeach's "liberal" authoritarian personality whose attitudes have been acquired through imitation or identification without the intervention of self-consciousness and self-selection.

Thus far, the theory underlying the hypotheses being tested in this study has been discussed; the next section summarizes some of the research on attitudes and attitude change which bears upon this investigation.

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[1] _Ibid_., p. 192.

[2] Rokeach, p. 58.

Summary of Relevant Research

Before reporting on studies regarding students' attitudes it seems desirable to examine the concept of attitude as it is used in this study and to comment upon the nature of the observations of attitude and attitude change that will be made. Like many psychological variables, attitude is a hypothetical or latent variable, rather than an immediately observable one. The concept does not refer to any one specific act or response of an individual, but is an abstraction from a large number of related acts or responses. A social attitude governs, mediates, predicts or is evidenced by a variety of responses to some specified set of social objects or situations. In this study student attitudes were measured by eliciting verbal responses to a battery of testing instruments. From this sample of verbal responses to questions about opinions, one should not make inferences about behavior other than verbal responses to similar verbal questions. It may be that responses to these questions are correlated with responses in nonverbal situations, but this must be determined experimentally. Thus far, however, the great preponderance of attitude research has made use of verbal methods of observation and measurement.

A large proportion of the investigations of attitude changes have had to do with some phase or duration of schooling. Investigators have been interested in such variables as a course of study, a teaching method, films, highly biased lectures, direct propaganda, and personal contact as factors influencing attitudes on a whole range of subjects.

As early as 1925, Symonds[1] attempted to measure the attitude of liberalism in students from grade eight to the senior year at the University of Hawaii. He came to the conclusion that formal education beyond grade eight was not able to change this attitude. However, Salmer and Remmers[2] found 112 college juniors and seniors reliably more "liberal" at the end of a semester's course in sociology. A slight effect of college training in the direction of liberalism was also observed by Jones (1926)[3] and Garrison and Mann (1931)[4] on attitudes toward political, economic, social and religious issues. Several other investigators who were also interested in measuring the increase in liberalism reported a close association between the amount of formal schooling and the degree of liberalism (Boldt and Stroud, 1935;[5] Katz and Allport, 1931).[6] Fersh (1946)[7] found that his statistical data were inconclusive as to the relative effectiveness of the problems-approach and conventional methods of teaching social studies to college students insofar as changing social beliefs is concerned.

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[1] P. M. Symonds, "A Social Attitudes Questionnaire," Journal of Educational Psychology, XVI (1925), 316-322.

[2] Cited by: Murphy, Murphy and Newcomb, Experimental Social Psychology (New York: Harper Brothers, 1937), pp. 950-951.

[3] E. S. Jones, "The Opinions of College Students," Journal of Applied Psychology, X (1926), 427-436.

[4] K. C. Garrison, and Margaret Mann, "An Analytic Study of the Opinions of College Students," Journal of Social Psychology, II (1931), 168-178.

[5] W. J. Boldt, and J. B. Stroud, "Changes in the Attitudes of College Students," Journal of Educational Psychology, XXV (1934), 611-619.

[6] D. Katz and F. H. Allport, Students Attitudes (Syracuse, New York: Croftsmen Press, Inc., 1931).

[7] George Leonard Fersh, "An Evaluation of the Changes in Certain Social Beliefs, Social Values, and Thinking Skills Effected in College Students by a Social Studies Course Based on the Problems-Approach Method of Teaching" (unpublished Ph.D. dissertation, New York University, 1949).

Contemporary studies on changes in specific attitudes appear to be as inconclusive as the early studies were. Plant (1962)[1] observed that changes in attitudes and values of the students who had withdrawn from college were in the same direction as those of students completing their college education although the changes in the non-collegiate groups were small compared to those of students attending college. Burleson (1960)[2] found no significant difference for either an experimental or control group in changing attitudes when contact with people from other lands was the experimental variable.

Looking at investigations which are directly related to the present study, namely the effects of specific school courses on self-insight and attitudes towards others, one finds that according to Costin (1959)[3] changes in self-insight were positively related to information acquired from an introductory psychology course on the undergraduate level, although course learnings not evaluated by examinations also probably played a part in effecting change. Stotland, Katz and Patchen (1959)[1] undertook an investigation to determine the conditions under which attitude change will occur through written communication designed to give self-insight and to study the relation between changes in self-insight and prejudiced attitudes among subjects differing in ego-defensiveness. The most consistent changes in reducing stereotypes about Negroes came through active self-involvement, an appeal to self-consistency through evoking the value of rationality and the relevance of the content to the attitude. Though the objective of the experiment was to increase the individual's self-insight into defense mechanisms, a number of people changed their attitudes on the basis of another type of understanding. They apparently gave serious consideration to the appropriateness of particular attitudes for the type of person they were. The process here was more one of self-recognition than of self-insight in relation to a recognition of the meaning of certain attitudes.

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[1] W. T. Plant, Personality Changes Associated with a College Education (San Jose, California: San Jose State College, 1962).

[2] Derek Lee Burleson, "Develping International Understanding; An Experiment in the Modification of Attitudes through Contact with People from Other Lands" (unpublished Ph.D. dissertation, Teachers College, Columbia University, 1960).

[3] Frank Costin, "The Effect of an Introductory Psychology Course on Self-Insight," Journal of Educational Psychology, L, No. 2 (1959), 83-87.

In summarizing the studies done on changing attitudes through specific courses offered in schools without the mediating action of consciousness of self, the authors John Harding, Bernard Kutner, Harold Proshansky and Isador Chein[2] conclude that the courses may or may not have a liberalizing effect upon the intergroup attitudes of students and on the nature of the subject matter, except that reports of significant favorable changes in attitudes outnumber the reports of insignificant or no change in attitudes by two to one. Because of the differences among research studies, it is difficult to determine what factors are responsible for the variations in results. Most investigators have found that individuals with a large amount of information about a particular group tend to have more favorable attitudes toward that group than individuals with less information. It is through this procedure, the transmission of information about specific groups, that courses offered in schools have attempted to influence intergroup attitudes. In the studies reporting significant favorable changes in ethnic attitudes, the authors found the following three conditions present in all instances:

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[1] Ezra Stotland, Daniel Katz and Martin Patchen, "The Reduction of Prejudice through the Arousal of Self-Insight," Journal of Personality, XXVII (1959), 507-528.

[2] John Harding et al., "Prejudice and Ethnic Relations," Handbook of Social Psychology, ed. Gardner Lindzey (Cambridge, Mass.: Addison-Wesley Publishing Co., 1954), II, 1021-1061.

(a) the information given was more favorable than that previously known to the average student;

(b) the instructor indicated his own attitudes which were more favorable;

(c) the relationship between the student and instructor was such that the student tended to accept the instructor's feelings and action orientation as well as the information.

One of the questions remaining to be answered is: If any of these conditions is lacking will significant favorable changes in attitudes take place? It was the intention of this investigator to control, as much as consciously possible, the expression of her own biases and particularly to maintain a position of neutrality with regard to the student's expressions of bias. The material presented was neither favorable nor unfavorable since the course was organized within the framework of cultural anthropology. As Newcomb[1] suggests, attitudes toward things change when the frames of reference in which they are perceived change. This may occur because changing events have made the old frames of reference irrelevant or impossible.

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[1] Theodore M. Newcomb, Personality and Social Change: Attitude Formation in a Student Community (New York: Dryden Press, 1943).

CHAPTER II

THE DESIGN OF THE STUDY

The purpose of this study was to determine whether it was possible for high school students to become conscious of their selves, alter their attitudes toward others and increase their ability to think critically about social problems by means of a course of study developed by the experimenter called "World Cultures" in which the students were to progress from the description and analysis of folk societies to the analysis and understanding of their own society and the influence it has had on the formation of their selves.

Since fundamental attitude changes are not likely to occur unless one's identifications are called into question, the period of adolescence appeared to be a particularly productive time for facilitating change through re-identifications. Learning experiences were developed to serve as intellectual and emotional stimuli for the student to take the roles or attitudes of other adolescents in other cultures. It was desired that the individual student would make use of the reflexive character of self-consciousness and bring himself within his own experiential view. He could, thereby, undertake to re-organize or re-integrate himself in terms of a new, much more inclusive social environment.

The study involved three groups. The investigator taught the experimental course, "World Cultures," for an academic year to the experimental group and a course in World History to one of the control groups. Another social studies teacher taught the conventional World History course to a second control group. This was intended as a control on the teacher variable and to determine, if possible, the extent to which the experimental variable was operative in the World History course taught by the investigator. A method of teaching emphasizing inquiry was utilized in both experimental and control groups. The content of lectures, readings, films and recordings was to be approached reflectively through group and individual discussion. A conventional textbook plus supplementary material (including audio-visual) served as the basis of the World History course. Specially prepared materials (for the most part ethnographic) plus supplementary readings and audio-visual materials served as the basis for the World Cultures course. Pre- and post-experiment measures were taken of the student's performance on a self-awareness scale, an attitude scale, and a test measuring the student's ability to think critically about social problems. Also available were results on course content achievement tests. Periodic tape recordings were made of the classroom activities. Interaction matrices were tabulated from these data. These matrices were then analyzed to determine whether teacher behavior was essentially the same for both groups since the investigator was attempting to evaluate the effect of content rather than method in this experiment. Further data relevant to the controls were obtained from a student feedback questionnaire. Information pertaining to intelligence, religion, ethnic background and educational experience of the parents was obtained from school records. Two personality tests were given at the end of the year in the eventuality that such information would be useful in the interpretation of the results.

Population and Sample

The subjects of this investigation were drawn from a population of students entering East Leyden High School as freshmen. The Leyden high school district serves six communities on the northwest side of Chicago. It is a modern suburban area with about three hundred industrial companies, many small business and commercial enterprises and such large manufacturing plants as International Harvester, Motorola, and Automatic Electric. About 70 per cent of the fathers are classified as semi-skilled or skilled workers. About 10 per cent are in managerial or professional jobs. In the graduating class of 1961-62, about 14 per cent of the fathers either graduated from college or participated in some type of college program; 27 per cent graduated from high school; 30 per cent participated in some type of high school program. Approximately 85 per cent of the people in this community own their homes and the Survey of Buying Power (1961) showed net earnings of $7,660 per household. There are some first generation foreign-born families, but in most cases the families are at least second generation Americans.

It was felt that this school would be the best choice of those available since a sample of children taken from this community would be representative of a large proportion of the high school students living in or near our great urban centers.

At East Leyden for the academic year September 1964 through June 1965, the school organization was determined largely through use of an IBM program. All of the classes had been arranged for and teacher assignments made at the time that the administrative decision was made to permit the investigation to be carried out. The experimenter was substituted as a teacher for two of the World History classes that were to have been taught by another social studies teacher (who subsequently undertook some other responsibilities related to the school) and was accepted within the social studies department and by the faculty as a regular member of the teaching staff. The decision was made not to inform the general faculty of the experiment until after all of the data had been collected and were ready to be reported upon.

The high school maintains a dynamic In-Service Program for teachers. Approximately once a month there is a special class schedule that ends the school day at 1:59 instead of 3:29 thus enabling the staff to apply their energies to the improvement of the curriculum. In addition, a new textbook and selected readings were being introduced into some of the World History classes for the first time that year. When classes met in the fall, the investigator explained to both experimental and control groups that the staff was continuously seeking to improve its programs of study and this was one of the reasons for the special In-Service schedule. Also, that this year the social studies department was using several different types of books and materials to learn which were effective in achieving the objectives that they believed to be desirable. Some of these objectives were cited and the array of texts and materials to be used was discussed. At the open house for parents later that month, appropriate observations concerning objectives and materials were made without any mention of the experiment. Because the school has been actively committed to self-evaluation and change, it was an excellent place for conducting an experiment without having it recognized as such by the students and personnel.

A member of the social studies department who has been teaching at East Leyden since September 1959 agreed to participate as the teacher of the second control group and it was decided that the investigator would be responsible for the complete testing program in all of the classes involved with the exception of the personality tests which would be administered by the Director of Counseling Service at East Leyden.

The experimental group was made up of thirty-three students, eleven boys and twenty-two girls; the control group taught by the investigator had thirty-two students, fourteen boys and eighteen girls; the second control group had thirty-one students, twenty boys and eleven girls. Tables 7-10 in chapter iii, infra, present the summary of background information obtained for each group. Classes met five days a week for fifty-five minute periods.

Description of Instruments Used

The major battery of tests used at both the beginning and end of the study consisted of the Inventory of Beliefs, Form I;

Gross' Self Appraisal Scale; Social Problems test; for the two control groups, the Cooperative World History test; for the experimental group, the investigator's World Cultures test. In addition, the California Mental Health Analysis and Rotter Incomplete Sentences were administered toward the end of the study.

Inventory of Beliefs, Form I

This inventory was initiated in conjunction with the activities of the Attitudes Sub-Committee of the Cooperative Study of Evaluation in General Education of the American Council on Education. It was developed in terms of four levels of interaction: the individual's relations to ideas and intellectual abstractions (ideocentrism), social groups and identifications (ethnocentrism), interpersonal relations (sociocentrism) and the self (ego-centrism). One hundred twenty items were selected from over three thousand cliches, pseudo-rational statements and inappropriate generalizations. The subject is asked to respond by means of a four-element code: strongly agree, agree, disagree, and strongly disagree. Some examples of items are:

"We are finding out today that liberals really are soft-headed, gullible, and potentially dangerous."

"The best government is one which governs least."

"People who say they're religious but don't go to church are just hypocrites."

"There may be a few exceptions, but in general Jews are pretty much alike."

This instrument was designed to distinguish students who tend to accept stereotypes and who are dependent and rigid in their attitudes from those who are more mature and adaptable in their attitudes and beliefs. Scores can range from 0 to 120 with a high score representing the non-stereopath or one who strongly disagrees with the statments. Reliability studies of the several existing versions of the Inventory have yielded reliability coefficients ranging from +.68 to +.95 with a median value of +.86. Similar results have been obtained with Kuder-Richardson, test-retest, split half, and parallel forms procedures.

This test yields an index of the extent to which an individual has difficulty in departing from traditional and customary ways of viewing phenomena and is indicative of the need for order and closure in his many relations with the world. An hypothesis suggests that such attitudes and views hinder the person in attacking complex problems especially in areas where a high degree of objectivity is required and in which the individual must prevent his own values and interests from interfering with the problem-solving task.

Self-Appraisal Scale

The Self-Appraisal Scale was constructed and partially standardized by Llewellyn Z. Gross at the University of Minnesota in 1947 for his doctoral dissertation. It consists of thirty-seven statements, each of which is presented as a multiple response item with five choices. These responses are scored on a scale from +2 through 0 to -2. The plus scores represent relatively high insight, the minus scores relatively low insight. A respondent's scale score is the algebraic sum of plus and minus scores made on the total set of statements.

For a statement to be included in the final form of the Self-Appraisal Scale, at least seventy-two per cent of a sample of sixty-four psychologists acting as judges had to agree that the statement could be used as a measure of self-insight and no more than eight per cent of the psychologists could disagree. Moreover, at least seventy-two per cent of these psychologists had to place a given statement in the disesteem category with no more than eight per cent of the psychologists placing it in the esteem category.

Gross defines self-insight as the acceptance and admission of both the presence and absence of personality traits within oneself when this acceptance runs counter to a system of emotionally toned ideas or when the admission of the presence or absence of these traits clashes with one's feelings of self-esteem. For Gross, self-insight is relative to

(1) the number, range, and quality of the perceptual relationships which serve to articulate the "I" with the "self", and

(2) the adequacy of the system of symbols used to describe and explain the content of the self.

The "I" is that which knows but cannot be known by the "self." The "self" is the totality of attributes, response tendencies and behavioral activities of the individual which are potentially open to perception by the "I." The more closely the symbols used correspond or fit the content of the self perceived by the I, the relatively higher the insight. If there are no symbols available to the individual with which to describe this content or if the individual has acquired fictitious symbols which he attempts to apply to the self, then to that extent he will be lacking in self-insight. The adequacy of the symbols used to describe and explain the self develop pari passu with

(a) the adequacy of the symbols which are used to describe and explain the outer world of social relationships, and

(b) the ease of transference and substitutability of these symbols with those applied to the self.

The adequacy of the symbols results from the habit of testing the applicability and reliability of symbols, flexibility in the use of symbols and viewing the world in relative terms. Ease of transference and substitutability is the result of training in role taking; diversity of social contacts (including the amount of criticism and censorship of people who differ greatly from oneself); degree of curiosity, responsiveness, receptivity to the acts of other people; emotional security.

If the above analysis is sound then the most severe test of self-insight will be found in the ability of the individual to accept as true those truths which are implicitly or explicitly denied by social usage and to accept as false those falsehoods which are implicitly or explicitly affirmed by social usage.

Two items from the scale follow; the entire instrument may be found in the Appendix.[1]

"Much of my reasoning consists in finding arguments for going on thinking as I already do."

"If it were not for the fear of disapproval I would probably violate certain social conventions."

Gross reports on several measures of generic validity (by which he means the agreement of his instrument with the conventionalized usages of the behavior being measured).

1. There were no significant correlations between scores on the Self Appraisal Scale and professors' ratings of thirty-seven students in respect to self-insight. Gross felt that the professors' ratings were probably lacking in objectivity.
2. There was a significant positive relationship between self-insight scores and the ratings of eighty-seven students' life histories by skilled case workers.
3. There was a low positive relationship between self-insight scores and the number of personal problems faced by respondents.
4. The correlation of scores obtained on the Self-Appraisal Scale with scores obtained on the Chapin Social-Insight Scale was +.381. The equivalent Pearsonian r = +.395, which would be significant at the one per cent level.

Since the theory underlying the Gross Self-Appraisal Scale and that underlying the objectives in the experimental course were comparable, the investigator felt that information for the testing of the hypotheses concerning self-insight could be obtained from the use of this instrument.

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[1] See Appendix, p. 100.

Social Problems

The Social Problems Test used in this study was a portion of that used in Fair's investigation of the effect of core and conventional curriculum on social concern[1] as adapted from the instrument developed in connection with the Eight Year Study of the Progressive Education Association. Its purpose is to appraise the student's growth in his ability to apply social facts and generalizations. In the original construction of the test a representative list of generalizations taught in social sciences was assembled. Criteria for appraising the behavior were outlined, the kinds of problems in which students may be expected to apply facts and generalizations were developed. Students were required to determine the logical relationships between conclusions, courses of action and certain generalizations and facts. The students marked the reasons which they would use to support the courses of action but each reason was keyed in several different ways. A reason may support two courses of action but be inconsistent with a third course of action and would be incorrect if used in support of that third course of action. In addition, each exercise contained two or three reasons which were contrary to known facts (i.e., were untenable) and they were scored as incorrect no matter with which course of action reasons were used to support. The courses of action were keyed to represent value positions and the reasons have been further keyed to indicate whether they are fact or value statements.

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[1] Jean Fair, "An Evaluation of the Comparative Effectiveness of Core Curriculum and a Conventional Curriculum in Developing Social Concern in Secondary School Students" (Unpublished Ph.D. dissertation, Department of Education, The University of Chicago), December, 1953.

On the chief scores used in interpreting the results (comprehensiveness ratio, per cent inconsistency, number democratic values, number undemocratic values, per cent democratic values), the reliabilities ranged from .70 to .91. The split-half method was used on scores which permitted such treatment and whenever the split-half method did not apply, the Kuder-Richardson formula was used.

The students in this experimental study were required to take some stand on a social problem, to support this stand with fact and value generalizations and to distinguish between these two. The test had the following form:

PROBLEM I: "NATURAL GAS"

Natural gas, which is in great demand as a fuel, is obtained chiefly from the oil fields of the South and West. Ordinarily an oil company producing gas sells it to a transcontinental pipeline company which carries the gas to local gas companies. They, in turn, sell gas to consumers. Duplication of pipelines is an unnecessary expense. Once the pipelines are laid, the natural gas can be bought from only one source.

The price which consumers must pay for natural gas depends upon the prices charged by producers, pipeline companies, and local gas companies. In order to protect consumers, the government regulates the prices, and thus indirectly the profits, of pipeline companies and local gas companies. So far, the producers have made profits, but have sold gas at low prices. However, the government does not regulate the prices charged by producers. They may raise their prices and thus raise consumers' gas bills, if they wish to do so.

Many people fear that the producers will soon raise their prices and so raise consumers' gas bills. The producers, however, oppose government regulation. They claim that they keep their prices as low as reasonable profits will permit.

What should be done about this situation?

Courses of Action:

1. Producers of natural gas should be free to charge whatever price for gas they think best.
2. Government should regulate the prices which producers of natural gas can charge.
3. Producers of natural gas should co-operate in studying consumer prices and future demands for gas and develop plans for keeping gas prices low.

Reasons:

2. Most of the natural gas is produced by a few large oil corporations, some of which have opposed limitations on their prices.
4. If consumers are required to pay unreasonably high prices for gas, they will have less money with which to buy other needed goods and services.
6. Graft and red tape in the government make it almost impossible for businesses regulated by the government to make profits.
8. Since the government has not set up long term regulation of the prices of coal and oil, it is unfair to set up long term regulations of the price of gas.
10. Producers can not be depended upon to consider the interest of consumers when that interferes with their opportunity to make profits.
12. The owners of supplies of natural gas should be allowed to make as much profit as possible.
14. Corporations would not object to government regulation of prices, for they have already shown their willingness to continue low prices.
16. Natural resources like gas and oil are of such importance in our economic system that they should be owned by the federal government.

18. Businessmen complain that government regulations are more difficult to interpret and predict than the plans and reports drawn up by businesses themselves.

20. If profits are high, large dividends can be paid to the many thousands of stockholders.

22. Competition is the best method for keeping prices down.

24. Some regulation of the price of natural gas is necessary, but it should be done without interfering with the rights of private ownership.

26. Producers have been selling gas at prices which make its cost to consumers lower in most places than the cost of coal or oil.

28. Unrestricted power concentrated in the hands of large and irresponsible corporations makes it difficult to maintain an economic system where human welfare is of most importance.

30. Our economic system has been the kind in which businesses themselves have decided upon the prices at which they would sell their goods and services.

32. In the past, such public utilities as railroads and telephone companies, which had little competition, charged high or discriminating rates until the government regulated their charges.

34. The greatest economic progress comes when each company has a free hand in conducting its business.

36. Government regulation of business is an undemocratic interference with private enterprise.

38. It is the responsibility of government to protect the interests of the general public.

Directions: Reread each statement in the list of reasons and for each odd number (from 3 to 39) on your answer sheet fill in space
4 if you believe that statement can be proved either true or false,
5 if you believe that statement can not be proved either true or false.

The entire test is included in the Appendix.[1] Three sets of scores were derived from the responses to this test. The first was the total number of generalizations chosen which were consistent with the course of action. Second was the score indicating the student's ability to distinguish between statements of verifiable fact and value generalizations which was to be derived by summarizing the number of correct responses to the items, and third was the value direction score, that is, a summary of the values that were dominant in the students' choices of courses of action.

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[1] See Appendix, p. 102.

Cooperative World History Test Form Z

This test was written by Frederick H. Stutz of Cornell University and published by the Cooperative Test Division, Educational Testing Service. It is an objective test designed to furnish information about the student's knowledge and understanding of the subject. The test contains eighty-five items covering the social, economic, political and cultural aspects of world history from the pre-historic age to post World War II. A close analysis of the items reveals that a student cannot rely on rote memorization alone and the investigator believed that the test would measure achievement of the broad objectives of the conventional world history course.

The manual supplied with the test contains detailed instructions for administering and scoring the test and suggestions for interpreting the results. The final score is corrected for guessing and is then converted to a scaled score. The definition which has been used for the Scaled Scores is as follows:

A score of 50 represents the score which the average child would make at the end of the particular course if he had attended an average school and had had the usual amount of instruction in the subject in question in the usual grade. "Usual amount" and "usual grade" was based on a summary of practices throughout the country and for the World History Test proved to be one year of study usually at the ninth grade. Reliability coefficients were calculated by correlating the scaled scores obtained on the odd-numbered items in a test with those obtained on the even-numbered items. For the 1935 form of the World History Test, the reliability coefficient was .805. Percentile norms based on data obtained in twelve high schools (979 cases) are also included.

Since two teachers were to be involved in instructing the control groups and since the instruments would have to be prepared for pre-testing purposes before the other teacher could be consulted, the investigator decided upon this standardized, objective instrument to measure student achievement in World History.

World Cultures Test

Out of a list of thirty-seven concepts[1] a sample of twelve was selected randomly to be used in the first part of the test on World Cultures. A statement or paragraph descriptive of the concept was followed by four alternatives. The ability to discriminate between the choices required knowledge and understanding of the concept. The second part of the test consisted of two passages, one characterizing a folk society, the other characterizing an urban society. The students were to write an essay describing what they inferred about the nature of the economy, the social relationships and the beliefs and values of the people in the society. A list of these inferences and the criteria for evaluating the essays were prepared. These were submitted to two judges[1] who independently agreed upon the validity of the key for scoring the test as well as the content validity of the multiple choice items. A sample item follows; the entire test has been included in the Appendix.[2]

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[1] See Appendix, p. 111.

> In the private dealings of the Hopis and in their conduct of village affairs, nothing is so frowned upon as agitation and heat--combativeness, self-assertion, envy, jealousy, quarrelsomeness, personal ambition, loud argument. The worst fault is to offend one's neighbor.
>
> This paragraph demonstrates
>
> 1. The weak and shy character of the Hopi.
> 2. The Hopi view of what is bad.
> 3. The good relationship that exists between neighbors.
> 4. The Hopi way of expressing himself.
>
> The paragraph above is an example of a society's
>
> 1. Values.
> 2. Religious conviction.
> 3. Socialization.
> 4. Status system.

To determine whether or not the test would reveal differences in achievement in a single classroom, the test was administered to a group of high school history students attending South Shore High School. The split-test method of estimating reliability was then applied using the odd-even method of splitting. The reliability coefficient obtained was .911. Using the Spearman-Brown prophecy formula, the reliability of the whole test was found to be .953. All of the pre- and post-test essay portions of the test were classified by the investigator and a sample of eleven randomly chosen from the thirty-three cases was classified by two judges according to the following directions.[1]

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[1] Both judges were graduate students and instructors in the Anthropology Department of the University of Chicago.

[2] See Appendix, p. 111.

> The units to be classified have been marked off and numbered. Assign each unit to one of the categories by puttings its number in the appropriate column.
>
> Column 1. Restatement: responses which are mere repetitions or simple rearrangements of a statement which has been supplied.
> Examples: The standard food was corn.
> The man in the story was showing his love for his father and mother.
>
> Column 2. Comprehension: responses which represent an understanding of the literal message contained in the supplied statements. This may be demonstrated through a "translation" from one level of abstraction to another or through an interpretive statement.
> Example: Hogan to Indian shelter.
> Examples: These people are Indian.
> Corn and sheep are available to them.
> These statements indicate that the student has dealt with the supplied statements as a configuration of ideas and thereby produced inferences, generalizations, summarizations.
>
> Column 3. Application: responses which make use of understandings and concepts pertaining to "folk" and "urban" societies in reference to these particular instances.
> Examples: The economy is based on farming and herding.
> The family is the primary social unit.
> Application requires comprehension but it is more concerned with the meanings the statements have for other generalizations.
>
> Column 4. Cross-Cultural Objective:
> Example: The wife, as in our society, has to keep her husband well-fed.
>
> Column 5. Cross-Cultural Subjective:
> Example: The economy of this village was not as high as ours.
>
> Column 6. Ethnocentric Value Judgements: responses which reveal an appraisal of the supplied statement(s) based on criteria which relate to himself.
> Example: He is a good man because he loves his parents.

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[1] A Research Associate, Department of Education (Asst. Prof.) and a graduate student, University of Chicago.

Column 7. None of these:
- (a) Student statements which are not clear in their meaning.
- (b) Incorrect interpretations or applications.
- (c) No other category seems to apply.

Two training sessions were conducted by the investigator before the judges did their independent classifications. Using another sample set of essays, agreement was reached regarding the meaning of the categories and the classification of the units in the sample. The final score for each essay was derived by totaling the number of units in columns 2 (Comprehension), 3 (Application), and 4 (Cross Cultural Objective). The students were then ranked according to their achievement with the highest score ranking as one. Spearman's rank correlation coefficient was used to determine the degree of association between investigator's and judges' rankings.

Table 1 summarizes the results of this test.

TABLE 1.--Rank correlation coefficients between investigator's ranking of student essays and those of two judges

	Judge 1	Judge 2
Pre-test	r' = .90	.99
Post-test	r' = .97	.98

Mental Health Analysis

This measurement instrument was devised by Louis P. Thorpe and Willis W. Clark and is published by the California Test Bureau. The Mental Health Analysis is organized into two categories, Mental Health Assets and Mental Health Liabilities, each with five components. Assets to be sought or amplified are:

A. Close Personal Relationships

B. Inter-Personal Skills

C. Social Participation

D. Satisfying Work and Recreation

E. Adequate Outlook and Goals

Liabilities to be minimized or corrected are:

L. Behavioral Immaturity

M. Emotional Instability

N. Feelings of Inadequacy

O. Concern about Physical Defects

P. Nervous Manifestations

There are two hundred items in the test and they are distributed equally between the two categories and among the ten components used for the analysis. High scores on the Assets components signify the presence of these qualities to a high degree, while high scores on the Liabilities components imply an absence of or "freedom from" Liabilities.

Reliability results are provided for each component score as well as for the Assets, Liabilities and Total scores. The coefficients of reliability were computed by Kuder-Richardson Formula 21 and are, quoting from the Manual, "expressed as the estimated correlation between a subject's 'obtained score' and his 'true score.'" The coefficients listed for the categories range from .87 to .93 and those for the components range from .79 to .87.

The Manual for the Mental Health Analysis also reports on five studies which indicate that the Liabilities category and components, the Assets category, and the Total score do differentiate between groups of individuals which have been judged to differ in adjustment patterns by an outside criterion.

The Mental Health Analysis was included in this study as a means of getting data which might be useful in interpreting relationships between status of mental health and performance on the Self-Appraisal Scale and the Inventory of Beliefs.

Description of Course Content

The content of the World History course taught to both control groups was based on a departmental course of study which included for each unit an introduction, general and specific objectives, an outline of the content, a guide sheet consisting of significant questions and recommendations for initiating and developing activities. Quoting from the general introduction:

> The World History Course should help students to appreciate and understand contemporary civilization. It emphasizes a knowledge of the beginnings and development of trends significant in shaping the present-day world. The course attempts to clarify the historical periods, developments, and events which seem most important for students to understand.
>
> Emphasis will be placed upon ideas, institutions, and precedents from which contemporary social orders have derived their form, character, and vitality.

The major objectives of the course follow:

> Through participation in the learning experiences of World History, the student should:
>
> 1. Interpret educational experiences as a means of practicing the democratic way of life.
> 2. Develop a better understanding of the origin, growth, and present status of society.

3. Show a knowledge of and interest in public affairs.

4. Become aware of the forces which make for the increasing interdependence of people and nations and the need for co-operation in public affairs.

5. Recognize the historical and geographical reasons for the behavior of regional national groups.

6. Gain an insight into how the different political beliefs in the world have developed.

7. Recognize the influence of the Church upon the development of western civilization.

8. Recognize the right of all people to follow their own patterns of culture.

9. Believe that human welfare and liberties are a part of the background of a contented world.

10. Understand that opinions built on knowledge are essential to thinking on public questions.

11. Show an attitude of intellectual curiosity and critical mindedness.

12. Recognize that change is an inevitable part of life.

13. Develop a growing interest in world affairs.

14. Show an interest in men and events of the past which will lead to profitable reading and appreciation of great literature.

15. Build a framework of values and ideals based on the foundation that the past has laid for the present.

16. Attain an appreciation, yet critical attitude toward races, nations, and customs.

17. Develop a keener appreciation of democracy as a mode of living, thinking, co-operating, and sharing responsibility.

18. Practice the democratic processes in planning group and individual activities.

19. Develop skills peculiar to social studies.

20. Acquire information to serve as a basis of comparison for all social studies problems.

21. Understand how our past economic institutions and practices evolved into the wide range of vocations that one may choose from today.
22. See the great struggles of past ages as attempts by society to adjust itself to changing conditions and the manner in which these forces are at work in the world today.

Units to be studied covered the periods from prehistoric times, early civilizations, the Middle Ages, the Renaissance and Reformation, the rise of nations, the two world wars, through the struggle for nationalism in the developing countries. The basic textbook used was Story of Nations by Rogers, Adams and Brown. Students were also required to read Van Loon's The Story of Mankind and four additional books of their own choosing from a selected bibliography. Appropriate films and filmstrips were shown and approximately one day a week all students were responsible for the content of their current events newspaper. Discussions in current events covered problems relevant to the presidential campaigns, Indonesia's withdrawal from the United Nations, extremist groups in the United States, the question of civil rights and civil disobedience. Several excerpts taken from student papers in answer to the question "Should extremist groups be outlawed?" will perhaps help in conveying the nature of the dialogue which transpired during classroom discussions on current problems.

> No, I do not think extremist groups should be outlawed. I believe the majority of Americans are not part of these groups and hearing about these groups makes clear to other Americans what their government stands for and they are all the more inclined to stand by it.
>
> Yes, extremist groups should be outlawed for the following reasons: they preach hatred, they provoke violence, they take the law into their own hands.
>
> No, our Constitution provides us with rights to form groups

> and have our own opinions. The definition of extremist we were given said groups that advocate hatred. There is no law to my knowledge that says that you must not dislike another. This is our decision to make. It is only when these extremists commit unlawful practices, are tried and found guilty that they can be outlawed.

> Yes, I think these extremist groups should be outlawed. They say they are not for violence but they do cause violence and corruption. I believe in integration if it is peaceful but I don't like violence.

> I would say extremists should be outlawed because they are not healthy for the country. Those who preach hate against whites or Negrores. Those who make riots, sit-ins, etc. But, according to this country's policy, we can not stop them unless they do illegal things.

> Extremist groups, in a way, help others to realize the wrongs of the world and thereby stimulate others to consider whether their government is doing what is expected of them. What are the faults and what can be done? But these groups can harm the general public when they give in to violent actions and are a menace to society. Extremist groups do not endanger the future of a generation; but rather improve the chances for improvement and can abolish a "bad government" policy. You can outlaw an act of hostility. You can not outlaw attitudes of hostility.

Students' arguments were diagrammed so that the logical development of the argument or the inconsistencies were revealed. If the logic of an argument was found to be acceptable, differences in value choices or priorities became the issue.

Each student in the first control group wrote two papers, one each semester, on topics or problems that they selected. The only stipulation was that they make use of references other than their textbooks and these were not to be exclusively encyclopedias. Some of the topics chosen were "Napoleon's Art of War," "The Soong Sisters," "King versus Parliament," "The Industrial Revolution in Great Britain: Economic, Political, Social Effects"; some problems investigated were "What are the factors common to all revolutions?", "Did the Russian and Chinese revolutions advance industrial development in those countries?", "Why did the philosophical contributions of German philosophers have to have been German?", "Can power be defined by looking at the U.S.A., Great Britain and Russia while at their heights of power?"

In the control group taught by the investigator and in the experimental group classroom discussions were carried on within the context of the following frame of reference.

1. How is the society organized? (kinship band, tribe, city-state, nation)
    (a) What is the structure of the elite? (chief, subchief, warriors, artists; priest-king, governors, landowners)
        (i) Is there mobility within the leadership structure?
    (b) What is the structure of the economy? (nomadic, agrarian, commercial)
        (i) Is there mobility? Vertically? Horizontally?
        (ii) Is there a division of labor? (define the roles)
2. What is the nature of the social relationships? (within family, between families, tribes; educational, recreational, religious institutions)
    (a) Into what social units are they organized?
    (b) Is it a homogeneous or heterogeneous society?
3. What are the values of the society? (implicit or explicit)
    (a) What is the nature of their belief system(s)?
4. What unique contributions to the development of civilization did this society make: (discoveries, inventions, advancement of knowledge)

The course in World Cultures was designed to enable students to achieve certain objectives. These were stated as follows:

1. To understand that:

   children born in a given culture have the same potentialities as other human beings born outside of that culture;

   children learn how to become members of their culture through continuous interaction with the membership;

   human behavior cannot be understood outside of its cultural context;

   moral judgments are derived from culturally defined premises;

   cross-cultural judgments require a cross-cultural frame of reference.

2. To be able to describe and analyze a folk society with regard to its pattern of values and the tasks associated with becoming an accepted member of the society.

3. To develop a framework within which cross-cultural judgments could be made.

4. To be able to describe and analyze an urban society with regard to its pattern of values and the tasks associated with becoming an accepted member of the society.

5. To develop a framework within which the material and intellectual productivity of man can be applied to the problems of all men everywhere.

The basic anthropological concepts were taught through readings and discussions of four folk societies: the Semang, Polar Eskimos, Maoris and Hopis. The basic reference used was

Gene Lisitsky's Four Ways of Being Human. Appropriate films and filmstrips such as "The Tropical Rain Forest," "Nanook of the North," "Australian Aborigines," "The Dawn of Religion" were shown. Concepts pertaining to the socialization process were developed from the reading and discussion of two studies by Margaret Mead, Coming of Age in Samoa and Growing Up in New Guinea. Concepts relevant to the sociology of knowledge were developed through the reading and discussion of the poem "Nightmare for Future Reference" by Stephen Vincent Benet and "Report on Grand Central Terminal" by Leo Szilard. Concepts pertaining to urban civilizations were acquired through research papers using classroom and library references and films.

Each society investigated was viewed within the previously outlined frame of reference. Such questions as "What is the effect of the physical environment on the development of cultures?"; "How does this culture differ from the other cultures studied thus far?"; "What do these cultures have in common?" were asked. Some examples of generalizations that the students evolved in answering the last question follow:

> All societies adapt themselves to their physical environment.
>
> All of the societies have developed means for explaining the unknown within the limits of their conceptions.
>
> All societies transmit their values, customs, traditions from one generation to another.
>
> All societies share these characteristics: they are made up of males and females; the females bear the young; they go through developmental stages; they have the ability to reason; they make and use tools; they have feelings of guilt; they are interested in enhancing their appearance.

Members of human societies always share a number of distinctive ways of behaving which, taken as a whole, constitutes their culture.

All societies have developed a system of symbolic behavior.

All societies strive to improve.

New ideas, diffusion of ideas are dependent upon contact with other cultures, conflict within a culture, and/or change in the physical environment.

All societies have their unique integrity, internal consistency, relationships among their parts.

Although each human society has its own culture, many distinct cultures have characteristics in common with one another.

Controls on Method

As was previously described in the discussion of the experimental design, the same teacher taught the experimental and one of the control groups. The experimental variable was the content of the course in World Cultures. The methods of instruction were the same. Specific information pertaining to classroom climate and teacher influence was obtained from:

(1) A student feedback questionnaire

(2) An analysis of classroom sessions based on sound tape records.

The data derived from the feedback questionnaire will be discussed first.

(1) The analysis of student feedback questionnaires

The student feedback questionnaires[1] were completed anonymously by the students during the final week of the course for the stated purpose of helping the teacher to improve the course.

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[1] See Appendix, p. 99.

Questions such as the following were asked.

What kinds of things or activities interested you most in this course?

What did you like least?

The answers were analyzed with the objective of course improvement in mind.

The questions following in Table 2 had the indirect purpose of determining differences, if any, in student reaction between the gouups.

TABLE 2.--Summary of student responses to feedback questionnaire (expressed in percent)

Question	Experimental	Control I
A. In comparison with other courses this one has been:	N = 30	N = 32
1. (a) More useful	53	31
(b) Average usefulness	30	66
(c) Less useful	10	03
(d) No response	07	00
2. (a) More interesting	53	47
(b) Average interest	30	31
(c) Less interesting	17	22
(d) No response	00	00
B. If you were considering another course taught by the same teacher, would his or her being the teacher be:		
(a) Added reason for taking it	63	59
(b) Make no difference	33	29
(c) Added reason for not taking it	04	06
(d) No response	00	06

There appears to be little difference between Experimental and Control Group I concerning their attitudes toward the teacher as these might affect the student's enrollment in another course taught by the same teacher, and about the relative interest of their respective courses. However, 53 per cent of the Experimental Group found this course more useful than other courses compared with 31 per cent of the Control Group. Thirty per cent of the Experimental Group found their course of average usefulness compared with 66 per cent of the Control Group.

To determine if these were statistically significant differences, the chi-square formula was applied to the distribution in Part 1, Question 1 of Table 2. With three degrees of freedom the $\chi^2 = 6.45$ is significant at the .10 level. This falls below the level acceptable for rejecting the null hypothesis in this investigation and it is therefore assumed that there were no significant differences between these groups in their responses to the Student Feedback Questionnaire.

(2) The analysis of taped classroom sessions

The behavior recorded on tapes was classified according to the Flanders' system of interaction analysis.[1] Six tapes were chosen at random from each group and the data were retrieved and tabulated. Comparisons between groups were made using the means for each of the following six categories:

1. The per cent of teacher talk
2. The number of indirect and direct teacher statements (the I/D ratio)
3. The kind of emphasis given to motivation and control in the classroom (the revised I/D ratio)
4. The per cent of steady-state cells indicating that one specific

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[1] Ned A. Flanders, Teacher Influence, Pupil Attitudes, and Achievement (Minneapolis: University of Minnesota Press, 1960).

kind of communication is being extended. (Either the teacher is, or the students are, taking time to expand on the ideas being presented.)

5. The per cent of student talk, the number of indirect and direct student statements. (Indirect student statements refer to prolonged talk by one student or talk of a student that follows that of another student. Direct student statements refer to student talk that follows teacher talk.)

6. The per cent of content, that is, teacher statements consisting primarily of lecture, statements of opinion, ideas, information and teacher questions about information and content that have been presented.

In order to obtain an estimate of the reliability of the investigator's classifications, a sample set of tapes including observations from both experimental and control groups was analyzed by an independent judge[1] and the investigator. Product-moment correlations between judge's and investigator's classifications were derived. The correlation coefficients for the six categories listed above are reported in Table 3.

TABLE 3.--Correlation coefficient between judge's and investigator's observations for six categories of the interaction analysis with significance level for eight degrees of freedom

Teacher Talk	I/D	Revised I/D	Steady State	Student Talk	Content
.98 p<.01	.95 p<.01	.89 p< .01	.88 p< .01	.74 p<.01	.95 p<.01.

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[1] A graduate student in the Department of Education, The University of Chicago.

All six coefficients were significant beyond the .01 level. Tables 4 and 5 summarize the data obtained from the two sets of classifications (Experimental and Control I) made by the investigator.

TABLE 4.--Summed matrix for the experimental group on six categories of the interaction analysis

Tape Number	Teacher Talk	I/D	Revised I/D	Steady State	Student Talk	Content
1	66.99	51.67	72.97	68.67	60.87	42.72
2	69.12	63.12	76.09	49.06	80.00	44.81
3	71.78	69.42	86.11	52.70	85.29	39.19
4	58.93	65.55	73.08	55.78	76.19	25.17
5	63.62	48.24	80.53	69.54	87.88	40.08
6	80.85	72.73	89.08	57.33	72.55	35.06
M	67.58	63.52	80.60	58.59	78.03	35.30

TABLE 5.--Summed matrix for the control I group on six categories of the interaction analysis

Tape Number	Teacher Talk	I/D	Revised I/D	Steady State	Student Talk	Content
1	71.73	70.44	92.54	65.20	84.21	45.95
2	61.15	57.14	88.36	73.65	75.00	33.78
3	69.58	42.42	70.31	55.88	66.67	49.12
4	64.44	46.58	69.67	62.62	74.14	43.06
5	50.56	39.89	80.41	74.69	73.21	36.51
6	61.29	53.25	68.66	63.02	74.76	34.32
M	61.25	51.37	77.53	67.09	73.89	38.20

The _t_ test was applied to determine the significance of the difference between the two means for each category. The computed _t_'s do not reach the .05 level of significance. We may conclude that the obtained mean differences could have occurred by chance

TABLE 6.--Critical ratio (t) between experimental and control I groups on six categories of the interaction analysis with significance level for ten degrees of freedom

Teacher Talk	I/D	Revised I/D	Steady State	Student Talk	Content
1.25 $.20<p<.30$	1.67 $.10<p<.20$	.26 $p = .80$	1.55 $.10<p<.20$	.54 $p = .60$	.67 $.50<p<.60$

and that there is no evidence that the two groups differed with regard to the verbal interaction that transpired, other than that which may be attributed to chance.

In this chapter, the sample used in the study was characterized, testing instruments were described, an over-view of the content and materials used in the two courses of study was given and data relevant to the controls that were applied to the teaching methods were provided.

CHAPTER III

THE RESULTS OF THE INVESTIGATION

The two preceding chapters have presented the background for several hypotheses concerning the relationships between knowledge and understanding of anthropological concepts and awareness of self, acceptance of others, and the ability to think critically about social problems. They have also given the design of the investigation including descriptions of the population of the sample, the instruments, the methods and content of the experimental and control courses of study.

Comparability of Experimental and Control Groups

Before presenting the data relevant to the hypotheses, it seems appropriate to provide more specific information concerning the nature and comparability of the three groups involved in this study.

Tables 7-10 summarize the data obtained from school records regarding sex, I.Q., religion and the number of years of schooling of fathers.[1] All students were high-school freshmen.

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[1] Nationality of parents was considered as one of the control variables but sixty per cent of the total number of students came from homes in which father and mother were of different nationalities and the remaining forty per cent were spread over nine categories which did not seem to lend themselves to meaningful regroupings.

TABLE 7.--Distribution by sex in experimental and control groups (expressed in per cents)

Number of Students	Group	Per Cent Male	Per Cent Female
33	Experimental	33	67
32	Control I	44	56
31	Control II	65	35
96	Total	47	53

TABLE 8.--Distribution of I.Q. scores[a] in experimental and control groups (expressed in per cents)

Number of Students	Group	Per Cent Average 90-109	Per Cent High Average 110-119	Per Cent Superior 120-139
33	Experimental	33	30	37
32	Control I	34	44	22
31	Control II	26	26	48
96	Total	31	33	36

[a] This classification of I.Q. scores was based on the distribution of composite I.Q.s derived from the Stanford Revision of the 1937 standardization sample published by Terman and Merrill.

TABLE 9.--Distribution of religion of parents in experimental and control groups (expressed in per cents)

Number of Students	Group	Per Cent Catholic	Per Cent Protestant	Per Cent Mixed[a]
32	Experimental	37	47	16
32	Control I	28	50	22
30	Control II	53	40	07
94	Total	39	46	15

[a] One parent Catholic, one parent Protestant

TABLE 10.--Educational background of fathers (expressed in per cents)

Number of Students	Group	Per Cent 8 Years of School or Less	Per Cent Between 8 and 12 Years	Per Cent More Than 12 Years
32	Experimental	12	69	19
30	Control I	13	77	10
24	Control II	16	68	16
86	Total	14	71	15

The frequency distributions for the variables, sex and I.Q., were such as to suggest the necessity for applying a chi-square test to determine if there were significant differences among groups with regard to these variables. On calculating chi-square for the sex distribution data, a value of $\chi^2 = 6.42$ was obtained. For two degrees of freedom a χ^2 as large as 5.991 would be found in less than five per cent of all random samples.

Since the value of χ^2 for sex distribution falls above the .05 level (which is the level of significance for rejecting the null hypothesis being used in this study) there is a significant difference in the distribution of sexes among groups.

While it was not expected that sex would be a factor in influencing differences between treatment effects, these findings prompted the application of the chi-square statistic again, this time to the two groups taught by the same teacher and by the same method; the comparison between these groups constituted the test of effectiveness of the experimental content. For these data $\chi^2 = 1.41$, which for one degree of freedom is significant between .20 and .30; we therefore conclude that there is no significant difference between the Experimental and Control Group I with regard to the distribution of males and females.

Table 11 summarizes the χ^2 values and the level of significance for the specified degrees of freedom for each of the control variables when applied to Experimental and Control Groups.

TABLE 11.--χ^2 values and significance levels for four control variables

Variable	χ^2	df	Level of Significance
Sex	6.42	2	$p < .05$
I.Q.	5.22	4	$p > .20$
Religion	5.31	4	$p > .20$
Father's education	1.24	4	$p > .80$

There were no significant differences between means of the total scores on the Mental Health Analysis for Experimental and Control Groups. For the difference between the Experimental and Control I groups, *t* was equal to 1.25; for the difference between the Experimental and Control II groups, *t* was equal to 1.00.

It should be noted that these variables come under discussion again in the analysis of the factors that may have affected the results. They have been considered here only in terms of their bearing on the comparability of the groups.

Random assignment to equivalent groups was not possible in this study. The experiment was conducted with classes already organized in the school program. Therefore, the data were analyzed by the methods of analysis of covariance. The class means were derived and treatment effects were tested against variations in these means. Pre-test means were used as the co-variate. Table 12 reports the pre-test means and the standard deviations for the three groups on the battery of tests.

TABLE 12.--Pre-test mean scores and standard deviations for experimental and control groups on five dependent variables

Instrument		Group		
		Experimental (N = 33)	Control I (N = 32)	Control II (N = 31)
Self-Appraisal	M.	-1.758	3.500	8.968
	S.D.	14.706	8.795	14.602
Inventory of Beliefs Commitment	M.	14.788	15.000	23.129
	S.D.	10.899	11.859	13.880
Inventory of Beliefs Commitment plus Tendency	M.	54.606	58.250	63.581
	S.D.	11.792	13.460	14.280
Social Problems Fact from Value	M.	-1.667	-2.300[a]	2.964[b]
	S.D.	7.334	9.407	9.724
Social Problems Fact from Value	M.	40.727	40.033[a]	39.464[b]
	S.D.	7.670	8.257	6.167
World History	M.		31.000	33.700
	S.D.		8.692	10.793
World Cultures	M.	6.909		
	S.D.	3.404		

[a] N = 30, due to incomplete data
[b] N = 28

Testing Hypothesis I

Based on the theory that consciousness of self and sensitivity toward others were inter-dependent and that this sensitivity was also associated with the ability to solve problems, it was assumed that the experimental treatment would affect these three variables concomitantly. Hypothesis I of this study was that *the Experimental Group will show significantly greater gains than either Control Group in achieving (a) greater self-insight, (b) less ethnocentrism, and (c) greater ability to think critically about social problems.*

Evidence for the support or rejection of this hypothesis was obtained from three tests: Gross' *Self-Appraisal Scale*, *Inventory of Beliefs*, and *Social Problems Test*, respectively.

A gain score was obtained for each individual student on each of these tests and then the mean gain scores were determined for each of the three groups. The significance of the differences between these means was determined by an analysis of covariance. The post-test scores were used as the variable with pre-test scores as the covariate. The *t* test was applied when suitable. Fisher's tables of *t* or F were entered with the appropriate degrees of freedom in order to determine the probability of obtaining such a mean difference by chance. A confidence level of five per cent or less was considered sufficient for the rejection of the null hypothesis. Rejection of the null hypothesis would here mean the acceptance of Hypothesis I of the study.

Each part of Hypothesis I will be taken in turn. Data for part one are presented in Table 13 below.

While the data obtained from the gain scores on the *Self-Appraisal Scale* were in the direction predicted by the hypothesis, statistical tests revealed that there were no significant differences between means of the three groups that could not be attributed to chance. Therefore, part (a) of Hypothesis I--*the experimental*

TABLE 13.--Scores and F ratio for experimental and control groups on the Self-Appraisal Scale

Group	Number		Pre	Post	F Ratio
Experimental	33	M.	-1.76	7.97	For 2 and 92 d.f.
		S.D.	14.71	17.42	
Control I	32	M.	3.50	10.12	
		S.D.	8.79	12.13	.39[a]
Control II	31	M.	8.97	16.87	
		S.D.	14.60	16.90	

[a] No significant differences

Group will show significantly greater gains than either control Group in achieving greater self-insight, was rejected.

Several different avenues will be explored as a means of introducing additional data that were useful in interpreting these outcomes. First, in chapter ii, under Population and Sample, the experimental and control groups were described as "intact classes"; in other words, the students were not randomly assigned to the treatments. The classes had already been organized and the investigation was undertaken with the anticipation that the statistical analyses would take account of differences within and among these groups. A disturbing question arose when data relevant to the controls were analyzed. The Experimental and Control II Groups were significantly different in their distribution of males and females. Would this have any influence on the experimental variables? An analysis of covariance was made on the scores of the three groups on the Self-Appraisal Scale controlling for sex. On calculating the F ratio the investigator found that there was no significant sex effect ($F = .93$), but there was a highly significant ($p < .01$) interaction effect ($F = 12.14$). The interaction of the components produces effects which cannot be explained merely by manipulating the two component variables.

Another piece of evidence bearing on this situation was obtained from data correlating sex with the Self-Appraisal Scale. For both Control Groups there were significant sex relationships with the Self-Appraisal post-test and gain scores although these were in opposite directions for the two groups, as shown in Table 14.

TABLE 14.--Correlation coefficients between sex and the Self-Appraisal Scale for two control groups

Group	Post	Gain Score
Control I	.34[a] $p = .05$	.47 $p = .01$
Control II	-.59 $p < .01$	-.60 $p < .01$

[a] Males are coded 1; females are coded 2

The coefficient of correlation between being a female and high scores on the Self-Appraisal Scale was significant at the five per cent level on the post test and beyond the one per cent level on the gain scores for Control I; for Control II the coefficient of correlation was significant beyond the one per cent level on both post-test and gain scores between maleness and high scores on the Self-Appraisal Scale. The differences obtained in the sex distribution of these groups could be attributed to chance ($\chi^2 = .68$).

While there was no significant correlation between sex and performance on the Self-Appraisal Scale on post-test and gain scores for the Experimental Group, there was a significant correlation (r = .35, p = .05) between maleness and high scores on the pre-test. Perhaps the experimental treatment intervened and interfered with the functioning of the sex factor as it appeared to be operating for the Experimental Group on the pre-test, but did not relate to performance on either post-test or gain scores as it did for the Control Groups.

If this experiment is to be replicated it would be desirable to match individuals in the groups for sex.

Second, there were no significant differences in the distribution of the sexes between the Control Groups, yet the Control Groups' relationships to performance on the Self-Appraisal Scale were in opposite directions. Does this indicate the presence of another factor or factors which may have been operative and were concomitantly associated with the sex factor as described? What associations, if any, exist between sex and personality development? Table 15 summarizes data relevant to this question.

As reported in Table 15, in the Experimental Group there was a significant coefficient of correlation between being a female and performance on the Mental Health Analysis. There was a negative correlation between total scores on the Mental Health Analysis and post-test Self-Appraisal scores, r = -.29, p = .10. The components contributing the most to this negative correlation were (M) Emotional Instability, (N) Feelings of Inadequacy and (P) Nervous Manifestations. Those who scored high on these

TABLE 15.--Correlation coefficients and levels of significance of scores on the Mental Health Analysis and sex and between scores on the Mental Health Analysis and the Self-Appraisal Scale

Mental Health Analysis Components	Experimental N = 33		Control I N = 32		Control II N = 31	
	Sex[a]	S-A Post	Sex	S-A Post	Sex	S-A Post
Assets						
A. Close Personal Relations	.41 .01	-.01 n.s.	.13 n.s.	-.19 n.s.	.30 .10	-.31 .05
B. Inter-Personal Skills	.58 .01	-.27 n.s.	.50 .01	.00 n.s.	.25 n.s.	-.29 .10
C. Social Participation	.36 .05	.13 n.s.	-.05 n.s.	-.07 n.s.	.35 .05	-.24 n.s.
D. Satisfying Work and Recreation	.46 .01	-.19 n.s.	-.15 n.s.	-.28 n.s.	.24 n.s.	-.24 n.s.
E. Outlook and Goals	.24 n.s.	.02 n.s.	-.01 n.s.	-.18 n.s.	.25 n.s.	-.24 n.s.
Liabilities						
L. Behavioral Immaturity	.30 .05	-.21 n.s.	.30 .05	-.26 n.s.	.53 .01	-.39 .05
M. Emotional Instability	.48 .01	-.44 .01	-.27 n.s.	-.43 .01	.12 n.s.	-.11 n.s.
N. Feelings of Inadequacy	.35 .05	-.32 .05	.12 n.s.	-.32 .05	.03 n.s.	-.14 n.s.
O. Physical Defects	.03 n.s.	-.22 n.s.	-.32 .05	-.31 .05	-.03 n.s.	-.07 n.s.
P. Nervous Manifestations	.03 n.s.	-.33 .05	-.25 n.s.	-.20 n.s.	.17 n.s.	-.16 n.s.
Total	.54 .01	-.29 .10	-.01 n.s.	-.37 .05	.19 n.s.	-.29 .10

[a] Males are coded 1, Females are coded 2

components scored low on the Self-Appraisal Scale. Components L, M, and N were positively correlated with sex where being a female was coded 2 and being a male was coded 1.

There was no significant correlation between sex and total scores on the Mental Health Analysis for Control II Group. There was a negative correlation between the Liabilities component (1), Freedom from Behavioral Immaturity, and the Self-Appraisal Scale, 4 = -.39, p = .05. This component was positively correlated, r = .53, p = .01, with being a girl. Those who scored high on component (L) scored low on the Self-Appraisal Scale.

Since there was a significant difference in the distribution of the sexes between these two groups, in the light of the above findings, would there have been a significant difference between the means of the Experimental and Control Group II on the Self-Appraisal Scale if this difference had not existed?

Why then was there not a significant difference between the means of the Experimental and Control Group I on the Self-Appraisal Scale gain scores?

Third, there were no significant differences in the distribution of the sexes between Control I and either Experimental or Control II Groups. Sex was not a factor in achieving high scores on the Mental Health Analysis for the Control I Group. The components contributing most to the negative correlation between total scores on the Mental Health Analysis and post-test scores on the Self-Appraisal Scale were: (M) Emotional Instability, (N) Feelings of Inadequacy, (O) Physical Defects. Of these, (O) was significantly correlated with being a male and (M) was correlated with being a male, the coefficient of correlation being -.27 ($.10 < p < .15$).

The boys in the Control I Group tended to be more free from emotional instability and were more free of physical defects than the girls. The opposite was true for the Experimental Group for components (M) and (N). Performance on the Self-Appraisal Scale does not appear to have a consistent relationship with sex. It seems to be more clearly associated with state of mental health. For each of the three groups there was a significant negative correlation between performance on the Mental Health Analysis and the Self-Appraisal Scale.

In summary, there is no consistent relationship between sex and performance on the Self-Appraisal Scale but there is a consistent negative relationship between state of mental health and self-awareness.

An interpretation concerning this inverse relationship will be advanced in the following section.

Fourth, evidently students who rank high on the Mental Health Analysis are unlikely to have insight into themselves. Is it possible that periods of self-examination and reflection are associated with a state of psychological disequilibrium? Was this reflected in the significant Liability components? The highest correlation between a Liability component and scores on the Self-Appraisal Scale was -.44 (component M) for Experimental and -.43 (component M) for Control I. The Experimental Group and Control I also showed significant negative correlations between component (N) and Self-Appraisal. There were no significant correlations between these components and performance on the Self-Appraisal Scale for students in Control II. The only component that had a significant relationship with Self-Appraisal was (L) Behavioral Immaturity (-.39).

Component (M), Emotional Instability, is described as a measure of the presence of non-adjustive behavior with items inquiring into evidence of disturbances in emotional tone, swings of mood, over-sensitivity. Component (N), Feelings of Inadequacy, is described as feelings of personal insecurity, failure to cope with every day problems, tendencies to underrate oneself because of imagined weaknesses or inferiorities. Component (L), Behavioral Immaturity, is described as a proneness to selfishness, rudeness, impatience, lack of consideration for others.

The characteristics of components (M) and (N) seem to be of a different quality from those of component (L). Components (M) and (N) seem to be descriptive of a state of being whereas (L) seems to be measuring tendencies toward actions.

Since the Experimental and Control I Groups were differentiated from Control II with regard to these components, is it possible that the method of instruction which the Experimental and Control I Groups had in common was influential in creating this state of being?

The method of instruction for these two classes was that of problem solving. Challenging questions pertaining to the structure and function of social institutions were asked within the framework described in chapter ii under "Description of Course Content." Experiences of this type, particularly for adolescents, may serve to heighten emotional sensitivities.

An examination of the status of the students with regard to mental health prior to the experiment would have provided an answer to this question. These data are not available and should be collected if similar studies are undertaken.

Fifth, the negative relationship between personality organization as measured by the Mental Health Analysis and self-insight as measured by the Self-Appraisal Scale leads to another interpretation of the data concerning Hypothesis I. The position may be taken that students who were "well-adjusted," comfortable with their existing state of being, were not as subject to the experimental treatment as those who tended to be or were in a state of disequilibrium. One of the assumptions underlying the experimental design was that adolescence would be a particularly productive time for facilitating change. This was the reason for selecting ninth graders as subjects. However, being classified as a ninth grader is not evidence of the fact that the developmental stage designated as the adolescent crisis (identity conflict) has manifested itself.

Sixth, another and opposing position may be taken, namely, that self-insight is a necessary prior condition to personality re-organization and re-integration but that it is not equivalent to it. From this viewpoint, students may have become more aware of their "selves," brought more to or changed the quality of the perceptions of their "selves" and had begun to accomodate themselves to these new realities. The probability of such a position is reinforced by the results of an interview with one of the students from the Experimental Group. What became evident from this interview was that the student had recognized and admitted to the presence of the attitudes expressed in the items in himself but he believed them to be inconsistent with his values. At least for this student, a low score on the Self-Appraisal Scale may not be attributable to a lack of insight but rather to a level of control of self beyond the stage of awareness. If this experiment is to be replicated, it would be desirable to follow up the Self-Appraisal Scale with an interview or questionnaire that would provide information pertaining to the student's perception of the item and how he reacted to it.

The various suggested interpretations as to why the means between Experimental and Control Groups on the Self-Appraisal Scale did not differ significantly will now be summarized. A significant correlation between males and high scores on the Self-Appraisal Scale coupled with the unequal number of males in favor of the Control II Group may in itself have accounted for no significant differences between the means of these groups. However, this could not explain the absence of a significant difference between the means of the Experimental and Control I Groups. It was suggested that another factor, the status of mental health, was a possible discriminatory factor which differentiated the Experimental and Control I Groups from the Control II Group. The first two groups had significant numbers of students who scored high on the Self-Appraisal Scale and who scored low in emotional stability while there were no significant coefficients of correlation between these two variables for Control II. They were differentiated from the

Experimental and Control I Groups by the significant correlation between high scores on the Self-Appraisal Scale with low scores on behavioral maturity. While a control or age was provided for in the experimental design and no significant difference between groups was obtained concerning their status of mental health, the failure to obtain pre-test scores on the Mental Health Analysis precludes the possibility of attributing the differences between the first two groups and the third group to the intervention of the experimental method. This limitation plus the inherent limitations of non-projective data such as those obtained from the Self-Appraisal Scale stand in the way of a more conclusive interpretation of these results.

Data relevant to fathers' educational background and the religious affiliation of the students showed no significant effects of these variables (within or between groups) on student performance on the Self-Appraisal Scale.

There were two significant correlations between intelligence and performance on the Self-Appraisal Scale. These are reported in Table 16.

There was a significant positive relationship between I.Q. and post-test scores for the Experimental Group, a significant negative correlation with the post-test scores for the Control I Group and no significant relationship between I.Q. and performance on the Self-Appraisal Scale for the Control II Group. There were no significant differences between the mean scores of these three groups with regard to intelligence.

These results will be discussed after the data concerning

TABLE 16.--Correlation coefficients between I.Q. and scores on the Self-Appraisal Scale for experimental and control groups

Group	Pre-Test	Post-Test	Gain Score
Experimental (N = 33)	.18	.33[a]	.23
Control I (N = 32)	-.24	-.35[a]	-.21
Control II (N = 31)	.03	.06	.06

[a] p = .05

the remaining hypotheses have been presented. Attention will now be centered on Hypothesis I, part (b), the Experimental Group will show significantly greater gains than either Control Group in achieving less ethnocentrism.

Evidence for testing the second part of Hypothesis I was obtained from the Inventory of Beliefs attitude scale.

The response to the Inventory of Beliefs involves a choice of one of four statements:

1. I strongly agree or accept the statement.
2. I tend to agree or accept the statement.
3. I tend to disagree or reject the statement.
4. I strongly disagree or reject the statement.

Two sets of data are reported. As may be seen by referring back to Table 12, means and standard deviations were calculated based on scores obtained first by differentiating between commitment (choices 1 and 4) and tendencies (choices 2 and 3) toward an attitude and, secondly, by combining commitment with tendency (choices 1 with 2 and 3 with 4).

Table 17 summarizes the data obtained from the Inventory when commitments and tendencies are combined.

Consideration of the data in Table 17 leads to the rejection of part (b) of the first hypothesis.

TABLE 17.--Scores and F ratio for experimental and control groups on the Inventory of Beliefs including both commitments and tendencies

Group	Number		Pre	Post	F Ratio
Experimental	33	M.	54.60	62.97	For 2 and
		S.D.	11.79	16.62	92 d.f.
Control I	32	M.	58.25	63.72	
		S.D.	13.46	13.00	.16[a]
Control II	31	M.	63.58	66.97	
		S.D.	14.28	12.30	

[a] No significant differences

Table 18 summarizes the data obtained when only choices 1 and 4 are tabulated, indicating a commitment to a value position.

TABLE 18.--Scores and F ratio for experimental and control groups on the Inventory of Beliefs including only commitments

Group	Number		Pre	Post	F Ratio
Experimental	33	M.	14.79	24.36	For 2 and
		S.D.	10.90	19.06	92 d.f.
Control I	32	M.	15.00	16.78	
		S.D.	11.86	10.71	4.79[a]
Control II	31	M.	23.13	20.61	
		S.D.	13.88	14.61	

[a] Significant beyond the .05 level.

The results reported in Table 18 show that there was a significant difference between groups on the Inventory that could be attributed to chance less than five times out of a hundred. The significance of the difference between gain score means was determined by applying the t test. The results are summarized in Table 19.

TABLE 19.--Gain score means, standard error and value of t for experimental and each control group on the Inventory of Beliefs

Group	Number	Mean	S.E.	Difference	t
Experimental	33	10.79	2.92	9.01	2.59[a]
Control I	32	1.78	1.83		
Experimental	33	10.79	2.92	13.30	3.82[b]
Control II	31	-2.52	1.90		

[a] $.02 < p < .05$

Considering the data in Table 19, we find differences between Experimental and both Control Groups at a level of confidence lower than that specified by the investigator, so the decision is to reject the null hypothesis and to accept part (b) of Hypothesis I that the Experimental Group will show significantly greater gains than either Control Group in achieving less ethnocentrism.

A discussion concerning the rationale for collecting two sets of data from the Inventory of Beliefs follows.

Consideration of the nature of the choices presented by the Inventory of Beliefs prompted the investigator to consider a method of scoring which would be an alternative to the one described in the Instructor's Manual. This decision was based on the conviction that there is a qualitative difference between the position "I tend to agree or accept the statement" and "I strongly agree or accept the statement." The research reported by Sherif, Sherif, and Nebergall[1] concerning attitude and attitude change seems to support the conviction. Based on research into latitudes of acceptance, rejection and non-commitment over the last fifteen years, these investigators evolved certain generalizations about the structure of attitudes. Two are directly relevant to the above stated conviction.

1. "Proportional to the moderateness of the individual's position on an issue, the size of his latitude of acceptance and rejection approaches equality."[2]

As stated earlier, no provision is made for a neutral choice on the Inventory of Beliefs. There may be only a trivial discrepancy between a position of 2 and 3 on the scale. The student who takes a "2" position may be somewhat indifferent to the matter and could readily assimilate the "3" position with his own and vice versa. The person who takes a "1" or "4" position, on the other hand, is likely to be highly involved in his stand and would undoubtedly find the opposite position unacceptable. Thus the second generalization:

2. "The latitude of rejection of a person with an extreme stand is greater than that of a person taking a moderate position on the issue and his latitude of non-commitment is smaller."[3]

Before making use of the alternative scoring procedure, it was necessary to determine if the reliability of the Inventory of Beliefs would be affected by such a change since the reliability tests reported on were based on the procedure for scoring stated in the Manual.

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[1] Carolyn W. Sherif, Muzafer Sherif, Roger E. Nebergall, Attitude and Attitude Change (Philadelphia: W.B. Saunders Co., 1965).

[2] Ibid., p. 233.

[3] Ibid.

Kuder-Richardson coefficients of reliability were computed for each of the three groups on pre- and post-test scores. Table 20 summarizes these data.

TABLE 20.--Coefficients of reliability for the Inventory of Beliefs using experimental and control groups' scores

Inventory of Beliefs	Experimental	Control I	Control II
Pre-test	.90	.92	.91
Post-test	.96	.88	.93

The median value of the reliability coefficients was .915. This compares favorably with the median value of .86 derived from the prescribed scoring procedure (combining commitment with tendency). It therefore seemed justified to use the alternative method of scoring.

As reported in Table 19, statistical treatment of the data obtained from the Inventory of Beliefs revealed significant differences between the means of Experimental and both Control Groups. Which items on the Inventory would account for these differences? Item analyses were run for each group. Items which differentiated the Experimental from the Control Groups had to meet these criteria:

1. That they represented the choice of at least 75 per cent of the students within a group;
2. That the choice had to be in the non-stereopath position;
3. That this non-stereopath position was a change from the pre-test position which was either that of the stereopath or spread inconclusively over the four choices;

4. That neither one of the Control Groups met these first three criteria.

The items which met all of these criteria are described in Table 21. These results take on added significance when we find that there is no item to which 75 per cent of a Control Group moved to the position of non-stereopath on the post-test when a majority of the Experimental Group chose the stereopathic position on the post-test. By translating these items into affirmative statements, it is possible to state that the majority of the students in the Experimental Group believe that ministers should be involved in discussions of social problems, that teachers need not give uncritical support to existing institutions; that an international tribunal should have the right to tell the United States what to do; that behavior is to be understood within the context of cultural experience; and that the pursuit of knowledge and understanding of human behavior should not be inhibited. The following reports of a discussion related to the need for objectivity in a heterogeneous culture and the concept of cultural relativism are introduced as indications of the kinds of experiences which were substantively related to the aforementioned items.

Apropos of the attitudes concerning involvement with value issues, one of the students in the Experimental Group asked the teacher if she had a religion. The teacher in turn questioned the relevance of the query. The student explained that since the class had concerned itself with the religious beliefs and institutions of a number of different societies all of which had

TABLE 21.--Items from the Inventory of Beliefs which differentiate responses of students in experimental from control groups

Item	Pre-Test			Post-Test		
	Agree	Disagree	No Majority	Agree	Disagree	No Majority
33. Ministers in churches should not preach about economic and political problems.			Experimental Control I Control II		Experimental	Control I Control II
66. A lot of teachers these days have radical ideas which need to be carefully watched.			Experimental Control I Control II		Experimental	Control I Control II
99. No world organization should have the right to tell Americans what they can or cannot do.			Experimental Control I Control II		Experimental	Control I Control II
100. Foreigners usually have peculiar and annoying habits.		Control II	Experimental Control I		Experimental	Control I Control II
117. We would be better off if there were fewer psychoanalysts probing and delving into the human mind.			Experimental Control I Control II		Experimental	Control I Control II

integrity within their culture, how could one make a choice? Further discussion led to the reformulation of the question by the student: Could I as a Catholic teach social studies? The class arrived at two major conclusions:

1. When a person assumes the role of teacher in a public school he makes a distinction between his personal preferences and his responsibility to bring to his students as many alternative solutions to problems as he can.

2. If a person has a sense of mission as a teacher which is sectarian in nature, he can choose the alternative of proselytizing within a sectarian institution.[1]

Concerning the attitude that behavior is to be understood in the context of a given culture, a discussion was undertaken in the Experimental Group stimulated by the question: What makes a Manus a good Manus? After characterizing the "good" Manus, one of the students was dissatisfied with the generalization that the class had derived, namely that the "good" person or "healthy" personality is relative to the cultural definition of "goodness" or "health." He felt that there must be a universal definition, that is independent of cultural context, for the "good" person or "healthy" personality. Since the student could not pursue this further in the group, a special interview was arranged. During this meeting the student advanced the following ideas:

> The healthy personality is one that strives for (a) what it wants, (b) what it needs. (a) and (b) are determined by the society. All societies have a basis for what they want the people to be like and this is "healthy" for them.

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[1] This discussion was recorded.

> If you are going to strive, then whatever society you move into, you strive to be like them.
>
> There is room for the self inside. There should be an outlet for the unconventional; then if the people find it profitable, they may change the unconventional to the conventional.[1]

Having accepted the concept of cultural relativity this student appeared to be seeking some interpretation of the human condition which would be universally applicable. His insights appeared to encompass the dynamic characteristics of man: growing, maintaining himself by changing to meet the conditions of his environment with the potential of changing his environment as well.

The following observations are made concerning data relevant to the control variables.

1. Performance on the Inventory of Beliefs was not affected by student's sex, religion, I.Q. or father's educational background.

2. There were two significant coefficients of correlation between sex and performance on the Inventory of Beliefs.

   (a) For the Experimental Group between pre-test Inventory of Beliefs scores and being a male (.43).

   (b) For Control I between post-test scores and being a female (.33).

3. There were no significant coefficients of correlation between sex and scores on the Inventory of Beliefs for Control II.

Finally, attention will be focused on Hypothesis I (c): the Experimental Group will show significantly greater gains than either Control Group in achieving greater ability to think critically about social problems.

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[1] Ninth grade male student in World Cultures, Leyden High School.

Data for the support or rejection of the third part of Hypothesis I were obtained from the Social Problems Test. This test covered several aspects: the ability to apply generalizations, the ability to discriminate between fact and value generalizations, and the selection of a value position. The scores for each of these are reported separately in Tables 22 through 25.

TABLE 22.--Scores representing the ability to apply generalizations on the Social Problems Test for Experimental and Control groups

Group	Number		Pre	Post	F Ratio
Experimental	33	M.	-1.67	4.12	For 2 and 92 d.f. 1.37[a]
		S.D.	7.33	9.52	
Control I	30	M.	-2.30	3.07	
		S.D.	9.41	8.52	
Control II	28	M.	2.96	4.57	
		S.D.	9.72	8.24	

[a] No significant differences

While it is not conventional to apply the t test unless there appears to be a significant F ratio at the acceptable level of confidence, as in the case of the data reported in Table 22, there was such slight difference between the gain score means of the Experimental and Control I Groups that the investigator felt that the significance of the difference between the Experimental and Control Group II might have been influenced by that fact. Therefore the t test was applied to the Experimental and Control II Groups and the value of t proved to be 2.08 which for 59 degrees of freedom is significant at the .05 level.

TABLE 23.--Scores representing the ability to discriminate between fact and value generalizations on the Social Problems Test for experimental and control groups

Group	Number		Pre	Post	F Ratio
Experimental	33	M.	40.73	45.15	For 2 and 92 d.f.
		S.D.	7.67	8.12	
Control I	30	M.	40.03	45.73	
		S.D.	8.26	7.61	6.62[a]
Control II	28	M.	39.46	38.64	
		S.D.	6.17	8.94	

[a] $.01 < p < .05$

Examination of the results reported in Table 23 showed that there was a difference between the groups in their ability to discriminate fact from value generalizations significant beyond the .05 level. The t test was applied and results are summarized in Table 24.

TABLE 24.--Gain score means, standard error and value of t for experimental and each control group on their ability to discriminate fact from value generalizations on the Social Problems Test

Group	Number	Mean	S.E.	Difference	t
Experimental	33	5.54	1.72	.16	.08[a]
Control I	30	5.70	1.11		
Experimental	33	5.54	1.72	6.36	2.46[b]
Control II	28	-0.82	1.93		

[a] No significant difference

[b] $.01 < p < .05$

An examination of Table 24 showed that there was no difference in the ability to discriminate fact and value generalizations between the Experimental and Control Groups taught by the same teacher but that there was a significant difference beyond the .05 level between the Experimental Group and Control Group taught by another teacher.

Another set of scores obtained from the Social Problems Test were (1) the per cent of liberal courses of action, (2) the per cent of middle-of-the-road courses, and (3) the per cent of conservative courses of action chosen by the members of each group. This information is presented in Table 25.

TABLE 25.--Value directions of courses of action chosen by Experimental and Control groups on the Social Problems Test (expressed in per cents of total number of choices)

Group	Number	Liberal		Middle-of-the-Road		Conservative	
		Pre	Post	Pre	Post	Pre	Post
Experimental	33	55	58	33	34	12	08
Control I	30	58	63	33	31	09	06
Control II	28	62	65	29	31	09	04

The chi-square test applied to the data in Table 25 produced a value of 2.27, which for four degrees of freedom showed no differences which were not attributable to chance between the value directions of courses of action chosen in the Social Problems Test by the Experimental and two Control Groups.

To summarize the findings for the three aspects of the Social Problems Test, there were no significant differences between the Experimental and Control Group taught by the same teacher for any of the three aspects; however there were significant differences beyond the .05 level between Experimental and Control II (taught by another teacher) concerning their abilities to apply generalizations and to discriminate between fact and value generalizations but no significant differences in value directions of the chosen courses of action.

The results pertaining to two of the three aspects of the test require further examination, namely,

1. The ability to apply generalizations, and
2. The ability to discriminate between fact and value generalizations.

The third aspect, selection of a value position, does not lend itself to further interpretation since there was a limited range of alternative positions (twelve in number) and there were no significant differences in the distribution of value positions or in the change of positions from pre- to post-test between the groups.[1] Concerning the aspect of the Social Problems Test entitled "the ability to apply generalizations,"[2] the student was required to choose a course of action regarding a given social problem and then determine the logical relationships between this course of action and certain facts and generalizations which were called "reasons." Data revealed no significant differences between Experimental and Control I gain scores but a significant difference between Experimental and Control II gain scores.

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[1] For all groups, the liberal or middle-of-the-road position was taken regarding employment of Negroes with the exception of one student who took the conservative position on the pre-test (Experimental Group) and one who took the conservative position on the post-test (Control I). This is consistent with their responses to items in the Inventory of Beliefs which tested for stereotypic thinking concerning Negroes. No other social issue produced these results.

[2] This aspect of the Social Problems Test will be referred to hereafter as Social Problems Test^1.

It had been suggested previously in the discussion of the Mental Health Analysis that the method of instruction which was common to the first two groups had heightened emotional sensitivities in some of these students. It is now suggested that this method of teaching emphasizing inquiry and/or the drifting over of the experimental content was responsible for the growing ability on the part of Control Group I to select generalizations which were related to the chosen value position. In this situation the students were asked to select a value position and find logical reasons to support that position. A question that remains to be answered is: If the students were required to establish these logical relationships for a range of value positions, without having the choice of a course of action which would be congruent with their own position such as they had in the Social Problems Test, would there still be no significant differences between the Experimental and Control I Groups or would the behaviors demonstrated by the Experimental Group on the Inventory of Beliefs (an openness to new ideas, the recognition that perspective differs according to one's "world view") prevail for them and permit them to remain objective to a degree that would differentiate them from Control I?

Grouping for sex and religion produced no significant effect on the Social Problems Test[1] scores; however, when grouping for father's educational background, the obtained F (3.42) was significant at the .05 level, indicating a significant effect of this variable on the ability to think critically about social problems.

These findings seem to be consistent with those reported by Bloom in Stability and Change in Human Characteristics,[1] namely that differences in school achievement are likely to be related to level of education of, and value placed on education by, the significant adults in the individual's life.

Intelligence and performance on the Social Problems Test[1] were associated in the way shown in Table 26 for the Experimental and two Control Groups.

TABLE 26.--Coefficients of correlation between I.Q. and scores on the Social Problems Test[1]

Group	Pre-Test	Post-Test	Gain Scores
Experimental (N = 33)	.41 $.01 < p < .05$	.42 $.01 < p < .05$	.12 n.s.
Control I (N = 32)	.49 $p < .01$	.56 $p < .01$	.02 n.s.
Control II (N = 32)	.39 $.01 < p < .05$	.11 n.s.	-.40 $.01 < p < .05$

I.Q.'s were positively associated with pre-test Social Problems Test[1] scores for all groups. I.Q's were positively associated with post-test scores for Experimental and Control I Groups but not significantly related to post-test scores for Control II.

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[1] Benjamin S. Bloom, Stability and Change in Human Characteristics (New York: John Wiley and Sons, Inc., 1964), p. 190.

I.Q.'s were not related to gain scores for Experimental and Control I Groups; but were negatively associated with gain scores on the *Social Problems Test*[1] for Control II.

The results obtained relevant to the second part of the *Social Problems Test*[1] were the same as those obtained for the first part: no significant difference between the gain score means of Experimental and Control I Groups but a significant difference ($.01 < p < .02$) between the gain score means of Experimental and Control II Groups. In attempting to interpret these results, the position may be taken that the students in the Experimental and Control I Groups acquired the skill in differentiating between statements that could be demonstrated to be true or false and those that could not through their learning experiences. They had repeated opportunities to apply these criteria when discussing problems pertaining to course content. Once again it is suggested that the instructional method was operative in producing these results.

Grouping for sex and religion produced no significant effect in the groups' ability to discriminate between fact and value generalizations. However, when grouping for father's educational background an F value of 3.98 was found which is significant at the .05 level. These results are consistent with those obtained for the *Social Problems Test*.[1] Intelligence and the ability to discriminate fact from value statements were associated in the ways shown in Table 27 for the Experimental and two Control Groups.

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[1] This aspect of the *Social Problems Test* will be referred to hereafter as *Social Problems Test*[2].

TABLE 27.--Coefficients of correlation between I.Q. and scores on the Social Problems Test[2]

Group	Pre-Test	Post-Test	Gain Scores
Experimental (N = 33)	.31 $.05 < p < .10$	.55 $p < .01$	.24 n.s.
Control I (N = 32)	.17 n.s.	.31 $.05 < p < .10$	.16 n.s.
Control II (N = 31)	.13 n.s.	.24 n.s.	.13 n.s.

There was a positive association between intelligence and performance on the Social Problems[2] pre-test for the Experimental Group which became more marked on the post-test. A positive association between intelligence and performance on the Social Problems[2] post-test developed for the Control I Group. There were no significant coefficients of correlation for the Control II Group.

To summarize: since there were no significant differences between the gain score means on either Social Problems[1] or Social Problems[2] for Experimental and Control Group I and since there was a significant difference between Experimental and Control II Groups, it is suggested that learning activities selected for the development of analytical competencies, i.e. the scientific method, in the first two groups and/or the drifting of the experimental content were instrumental in producing these results. The variables I.Q., and father's educational level, were significantly associated, for the first two groups, with their ability to apply these behaviors.

Table 28 gives the significance level of the differences between the mean gain scores for experimental and control groups on three dependent variables.

TABLE 28.--Summary of tests of Hypothesis I

	Experimental Control I	Experimental Control II
a) greater self-insight	n.s.d.	n.s.d.
b) less ethnocentrism		
i) commitment	$p < .02$	$p < .01$
ii) commitment plus tendency	n.s.d.	n.s.d.
c) ability to apply generalizations	n.s.d.	$< .05$
ability to discriminate between fact and value generalizations	n.s.d.	$< .02$

Testing the Second and Third Hypotheses

The learning activities associated with the experimental treatment were developed as intellectual and emotional stimuli for the students to take the roles or attitudes of individuals in other societies. It was suggested that such practice might free the students from the press of their own milieu and permit them to view their own experience and the institutions of their own society with relatively greater degrees of objectivity. As the materials and activities of the "new" programs in mathematics provide students with opportunities to move out of the familiar and accepted mathematical systems, so might the materials and activities of a course based on cultural anthropology provide the student with opportunities to move out of the familiar and accepted social "establishment."

It seemed reasonable to expect, then, that the more successful a student was in achieving the course objectives, the more capable he would be of viewing social problems critically.

Hypothesis II was formulated as follows: For students in the Experimental Group, there will be a significant positive relationship between tests measuring knowledge and understanding of specific course content and the test measuring ability to think critically about social problems.

Data for the support or rejection of this hypothesis were obtained from the two aspects (applying generalizations and discriminating between fact and value generalizations) of the Social Problems Test and the course content test, World Cultures.

The degree of relationship between these two sets of test scores was determined by the product-moment method of correlation. Table 29 summarizes the results.

TABLE 29.--Coefficients of correlation between gain scores on the Social Problems Test and the World Cultures Test for the Experimental Group

	World Cultures Test Gain Scores
Social Problems a) Ability to apply generalization	.74 $p < .01$
b) Ability to discriminate fact from value generalizations	.09 n.s.

Hypothesis III was the reciprocal of Hypothesis II. It stated that for students in the Control Groups, there will be no significant relationship between achievement on tests measuring knowledge and understanding of specific course content and the test measuring ability to think critically about social problems. Data for the support or rejection of this hypothesis were obtained from the two aspects of the Social Problems Test as mentioned above and, in this case, from the course content test, World History.

Table 30 summarizes the results using the same variables as reported in Table 29.

TABLE 30.--Coefficients of correlation between gain scores on two aspects of the Social Problems Test and the World History Test for two control groups

	World History Gain Scores	
	I	II
Social Problems		
a) Ability to apply generalizations	-.05 n.s.	-.02 n.s.
b) Ability to discriminate fact from value generalizations	-.12 n.s.	.39 $p<.01$

These two hypotheses dealing with the relationship between achievement in course content for each group and their respective performance on the two parts of the Social Problems Test will be discussed together.

Since there was a significant coefficient of correlation between achievement on the Social Problems Test[1] and World Cultures Test for the Experimental Group but no significant coefficient of correlation between Social Problems Test[2] and achievement on the World Cultures Test for this group, it appears that the subject matter of the experimental course was relevant to the development of the ability to select generalizations which were consistent with a particular value position but was not relevant to the development of the ability to discriminate fact from value generalizations.

Course content tests were not associated with the ability to apply generalizations for either control group nor were the coefficients of correlation obtained from gain scores on the World History Test and Social Problems Test^2 significant for Control I. In Control Group II however, those who gained the most on their course content tests also gained the most on Social Problems Test^2.

Grouping for sex, religion, father's educational level had no effect on course content tests for any of the groups. I.Q. was positively correlated in each case with pre- and post-test but not with gain scores as shown in Table 31.

TABLE 31.--Coefficients of correlation between I.Q. scores and course content tests for experimental and control groups

Group	Pre-Test	Post-Test	Gain Scores
Experimental (N = 33)	.39 p=.05	.41 p=.05	.26 n.s.
Control I (N = 32)	.51 p<.01	.54 p<.01	.35 .05< p <.10
Control II (N = 31)	.55 p<.01	.55 p<.01	.17 n.s.

To summarize the data obtained relevant to the two parts of the Social Problems Test and the course content tests:

1. There was no significant difference between gain score means on Social Problems Test^1 and Social Problems Test^2 between

Experimental and Control I Groups.

2. There was a significant difference between gain score means on Social Problems Test^1 and Social Problems Test^2 between Experimental and Control II Groups.

3. There was a significant coefficient of correlation between gain scores on Social Problems Test^1 and World Cultures Test for the Experimental Group.

4. There was no significant coefficient of correlation between Social Problems Test^2 and World Cultures Test for the Experimental Group.

5. There were no significant coefficients of correlation between Social Problems Test^1 or Social Problems Test^2 and World History Test for Control I.

6. There was no significant coefficient of correlation between Social Problems Test^1 and World History Test for Control II.

7. There was a significant coefficient of correlation between Social Problems Test^2 and World History Test for Control II.

8. There was no significant difference between gain score means ($t = 1.76$) on the World History Test between Control I and Control II.

The absence of any consistency in the way in which these variables functioned makes it unlikely that the significant difference obtained between gain score means on the Social Problems Test for Experimental and Control II Groups was attributable to the difference in the content of the courses.

Examination of Tables 21 and 22 showed that Hypotheses II and III may be accepted for the first aspect of the Social Problems

Test but have to be rejected for the second aspect.

It was stated earlier in this chapter that after interpretive remarks were made concerning the hypotheses, a discussion relevant to the coefficients of correlation between I.Q. and a number of the experimental variables would be undertaken. The data pertinent to this discussion are summarized in Table 32.

TABLE 32.--Coefficients of correlation between I.Q. and five dependent variables for experimental and control groups

Group	Post-Test Scores				
	Self-Appraisal	Inventory of Beliefs	Social Problems[1]	Social Problems[2]	Content Tests
Experimental	.33	.15	.42	.55	.41
Control I	-.35	.13	.56	.31	.54
Control II	.06	.09	.11	.24	.55

It appears that those students with high intelligence in the Experimental Group performed well on the Self-Appraisal Scale on Social Problems Test[1], Social Problems Test[2] and on the World Cultures Test.

Those with high intelligence in Control I did not perform well on the Self-Appraisal Scale, performed well on the Social Problems Test[1], Social Problems Test[2] and the World History Test.

There was only one significant coefficient of correlation for Control II and that was between high intelligence and performance on the World History Test. Apparently for this group I.Q. made a difference in how a student performed on the World History Test, tended to make a difference in his ability to discriminate fact from value statements but was unimportant in relation to performance on the Social Problems Test[1], Inventory of Beliefs, and Self-Appraisal Scale. On the other hand, I.Q. was important in the Experimental and Control Groups for performance on all instruments except for the Inventory of Beliefs. For all three groups, then, I.Q. was not associated with quantity of stereopathic or non-stereopathic attitudes and was associated with successful performance on course content tests. For the two groups taught by the same method, I.Q. made a difference in performance on the Social Problems Test; students with high I.Q.'s could more readily develop the behaviors required for successful performance on this test. I.Q. made a difference for these two groups in their performance on the Self-Appraisal Scale with a positive coefficient of correlation for the Experimental Group and a negative coefficient of correlation for Control I Group. These results may be viewed as supportive of one of the interpretations made concerning the absence of a significant difference between the gain score means on the Self-Appraisal Scale between the three groups.

It was suggested that consciousness of self was a prior condition to the reorganization and accommodation of the self to these new realities but not equivalent to it and that for some of the students in the Experimental Group, a low score on the Self-Appraisal Scale might have been attributable to the level of control of self beyond the stage of awareness. These data are viewed as supportive of this since, for the Experimental Group, I.Q. was positively associated with content and also with performance on the Self-Appraisal Scale and the World Cultures Test tended to be significantly correlated (r = .27) with the Self-Appraisal Scale. For Control I, I.Q. was positively associated with the Self-Appraisal Scale and the World History Test tended to be negatively associated (r = .19) with the Self-Appraisal Scale. For Control II, I.Q. was positively associated with the Self-Appraisal Scale and the World History Test was not associated (r = .01) with the Self-Appraisal Scale. It is interesting to note that while there was a positive association between content tests and the Mental Health Analysis for the Control Groups (r = .30, .31) there was no association between the content test and the Mental Health Analysis for the Experimental Group (r = .06). It should be recalled that coefficients of correlation between the Mental Health Analysis and Self-Appraisal Scale were significantly negative.

The following chart represents an attempt to synthesize the relationships existing between the independent and dependent variables for these groups.

Group	Independent Variable	Dependent Variable
Control II	Conventional Method Conventional Content	1. World History Test
Control I	Experimental Method Conventional Content	1. World History Test 2. Social Problems^1 3. Social Problems^2
Experimental	Experimental Method Experimental Content	1. World Cultures Test 2. Social Problems^1 3. Social Problems^2 4. Inventory of Beliefs

In the Control II Group where the instructional content and methods were conventional, students were able to achieve knowledge and understanding of course content as well as the Control I and Experimental Groups. The introduction of an experimental method enabled students in Control I and Experimental Groups to achieve significantly greater gain scores on the test measuring the ability to apply generalizations appropriate to a value position and to discriminate between fact and value statements. Finally, the introduction of the experimental content in addition to the experimental method enabled the students in the Experimental Group to make significantly greater gains on the Inventory of Beliefs than either control group.

The data pertaining to the Self-Appraisal Scale were not included in this chart because of their interaction effect with the sex variable.

Data relevant to the hypotheses and control variables defined for this study were presented and discussed in this chapter. In the next chapter, the study will be summarized, some implications drawn and concluding remarks made.

CHAPTER IV

SUMMARY AND IMPLICATIONS OF THE STUDY

This study sought to obtain evidence toward the substantiation or refutation of certain theoretical propositions concerning the effects of course content on attitude change. These propositions appeared to have an internal consistency and it was therefore anticipated that the hypotheses derived from these propositions would stand or fall together. The three hypotheses tested in this experiment were:

I. The Experimental Group will show significantly greater gains than either Control Group in achieving (a) greater self-insight, (b) less ethnocentrism, and (c) greater ability to think critically about social problems.

II. For students in the Experimental Group, there will be a significant positive relationship between achievement on tests measuring knowledge and understanding of specific course content and the test measuring ability to think critically about social problems.

III. For students in the Control Groups, there will be no significant relationship between achievement on tests measuring knowledge and understanding of specific course content and the test measuring ability to think critically about social problems.

The experimental treatment consisted of a course of study organized to assist the students in developing a sequence of concepts in anthropology. These concepts dealt explicitly with the structure and function of social institutions in folk and urban cultures.

The results of the investigation were not consistent with the expressed theory. Hypothesis I (a) was rejected. Hypothesis I (b) was accepted. Hypothesis I (c) was rejected, but the data were such as to identify the instructional method as a likely independent variable in determining a student's ability to think critically about social problems. Hypotheses II and III were accepted insofar as the relationship between the student's ability to apply generalizations and performance on course content tests was concerned but was rejected with respect to the relationship between the ability to discriminate fact from value generalizations and performance on course content tests.

Since the investigator's criterion for the potential usefulness of the findings was their logical consistency, further discussion of these findings is required.

Much of the research that has been done in teaching and learning has manipulated and controlled variables in order to demonstrate effects, establish relationships, or verify predictions. They have dealt primarily with "products" of the educative process rather than the process itself. This study did not depart from this procedure. It did, however, provide a theoretical description of "process" and it was an implicit hope that (while lacking in proof) the demonstration of a positive relationship between the first two variables as stated in Hypothesis I would advance our understanding of what is happening when a student is subjected to certain content stimuli in a classroom. In other words, if gain scores on the Self-Appraisal Scale and the Inventory of Beliefs for the Experimental Group were significantly higher than those of the Control Groups, one might feel more secure in accepting Mead's interpretation of how the reflexive process operates. Several different avenues were explored in chapter iii in order to understand better why the results pertaining to the Self-Appraisal Scale were inconclusive. What remains to be said now is that if one is seeking information concerning "process," a more direct approach seems appropriate. This could perhaps be done through clinical or idiographic techniques since there is the need to understand the intrapsychic relationships within a personality before we can answer the process question.

Although little can be said with confidence concerning how the change was brought about, the data obtained from the gain scores on the Inventory of Beliefs were as predicted by the hypothesis. Apparently students' attitudes do change when they have the conscious understanding of concepts in the field of cultural anthropology. There remains, however, a serious concern in the investigator's mind as to the equivalence of scores. This, of course, is not unique to the scores on the Inventory of Beliefs, but refers to all of the instruments used. Statistically, a gain score of 10 points is the same whether it represents a gain from 0 to 10 points, a gain from 15 to 25 points or from 50 to 60 points. Are the experiences of the student who starts out accepting all ethnocentric statements as expressions of his own the same as the experiences of the student who initially accepted fewer of them? Will the effects of the treatment be the same for the student who is being stimulated in a new direction for the first time and for the student who is organizing, clarifying, or synthesizing past experience?

One of the outcomes of the study for the investigator has been the rediscovery of the need for the researcher to get direct feedback, the introspective reflection of the subjects of the investigation so that all knowledge of what is happening within the subjects need not be deduced from observable behavior.

A final comment will be made with respect to Hypotheses II and III. An analysis of the data pertaining to the relationships between the two parts of the Social Problems Test and the respective content tests, World Cultures and World History, revealed no correlation between achievement in World History and the ability to apply generalizations to chosen courses of action, but a significant positive correlation between achievement in World Cultures and the ability to apply generalizations to chosen courses of action. As for the relationship between achievement in course content tests and the ability to discriminate fact from value generalizations, there was no significant relationship except for Control Group II. It is interesting to note that almost one half (48 per cent) of the students in the Control Group II had superior I.Q. scores (between 120-139) whereas for the Control Group I only 22 per cent of the students fell into that category and 37 per cent of the Experimental Group were of superior intelligence. It is now suggested that intelligence was a determining factor in achieving high scores on the World

History Test and that it was equally operative in making it possible for a student to discriminate between fact and value statements.

Implications for Curriculum

Since 1958 there has been a large number of curricular reforms in content, particularly in science and mathematics. These changes of content in most instances have been for the sake of bringing more recent knowledge into teaching and textbooks. Sometimes the shift has been from content that specialists considered trivial or outdated to something they regard as having greater significance. In general these innovations have been approached with the same principles of pedagogy that have been in use for a long time: defining what one wants the student to do, teaching him how to do it, giving him opportunities to practice it and rewarding him when he is successful. This study was similar to the attempt to update the curriculum in science, introducing as it did anthropological concepts into the social studies curriculum, but the purpose in doing so was different. This experiment in curriculum was primarily interested in the question of indirect learning. Emphasis was not on the lesson itself, not on the responses practiced during the lesson and reinforced afterwards but on the development of a superstructure of attitudes and intellectual skills. This study was concerned with a type of transfer in which, as a result of doing a number of problems, a student could become more able to understand, to learn about, or to cope with a problem that was different in content and/or in structure from the types of problems practiced.

This sort of development of mental functioning seems, in turn, to be related in some ways to the psychology of cognitive development, i.e. the cognitive operations which emerge in the course of ontogenesis.[1] Guided by theory, specialists in curriculum have accepted the concept of developmental stages of cognition but there is no consensus as to which experiences should be provided at a given age which would be suitable for realization of this developmental stage. This experimental design implied that the experimental content was suited to the period of adolescence and would facilitate the achievement of appropriate objectives in cognitive functioning. The results of the investigation indicated that the objectives of attitude change and skills in problem analysis were appropriate to an adolescent group but the variable of emotional development was related to variations in achievement.

A significant indirect outcome of the study (one not related to the hypotheses), then, was that readiness for an instructional program cannot be determined by achievement tests alone. Pre-testing for status of knowledge is adequate when concerned with an "identical-element" transfer of learning but inadequate for the type of transfer described above. A description of the student's psychological development, affective as well as cognitive, is necessary to determine readiness for this second type of transfer if we are concerned with efficient use of time and energy.

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[1] Cf. Jean Piaget, The Construction of Reality in the Child, trans. Margaret Cook (New York: Basic Books, 1954).

Conclusion

It was anticipated that from this study generalizations would be developed pertaining to the ability of adolescents to become increasingly aware of their "selves," extend their capacities to respond to values different from their own and consequently become more responsible in their treatment of social problems. It was further anticipated that the appropriateness of the type of content used in the experimental course for the achievement of these ends would be determined. The experimental content was effective in changing attitudes measured by the Inventory of Beliefs, it was associated with the ability to apply generalizations to alternative solutions to social problems but there was no evidence to suggest that there was a causal relationship. Nor can it be said that the experimental content was instrumental in increasing self-awareness.

APPENDIX

THE UNIVERSITY OF CHICAGO
Chicago • Illinois 60637
The Department of Education

STUDENT FEEDBACK QUESTIONNAIRE

To Assist the Teacher in Improving the Course

1. What kinds of things or activities interested you most in this course?

2. What did you find most helpful?

3. What did you like least about this course?

4. What did you find least helpful?

Place a ✓ mark above the answer you select.

In comparison with other courses has this one been

a) More useful — average usefulness — less useful

b) More interesting — average interest — less interesting

If you were considering another course taught by the same teacher, would his or her being the teacher be

a) added reason for taking it — make no difference — added reason for not taking it

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If you were considering another course taught by the same teacher, would his or her being the teacher be

a)	added reason for taking it	make no difference	added reason for not taking it

A Self Appraisal Scale

Please indicate your degree of agreement or disagreement with each of the following statements by filling in the space on your answer sheet next to the number of the response which most nearly represents your opinion of yourself.

1. strong agree 2. agree 3. uncertain 4. disagree
5. strongly disagree

1. Undoubtedly, there are some people who would find my personal habits annoying.

2. At times I have made unkind and depreciating remarks about individuals who were not present to defend themselves.

3. I am not afraid to fully explore the hidden sources of my personality.

4. I have criticized other people for saying things that I might very well have said myself.

5. I am sure of only those things of which I have proof.

6. I have accused other people of possessing traits which were really a part of my own personality.

7. At times I have been so displeased with other peoples' actions as to wish revenge.

8. I have no need to deceive myself on anything concerning my personality.

9. Much of my reasoning consists in finding arguments for going on thinking as I already do.

10. I have on occasion rejected new ideas because they were not emotionally satisfying.

11. I have some personal obligations which I would rather leave for other people to perform.

12. I have always appreciated a frank criticism of my faults.

13. I have never evaded facing the truth.

14. Occasionally I have sexual thoughts which I would not like to reveal to other people.

15. I can as easily laugh at myself as at other people.

16. I have never tried to make anyone believe that I am a different person from what I know myself to be.

17. I have criticized other people for doing things that I might very well have done myself.

18. I have never lacked courage when in need of it.

19. I have at some time acted upon the basis of self interest knowing that my gains would be another's losses.

20. I am always careful to correctly describe what I have read or seen.

21. There is no one who might think of me as a selfish person.

22. There are times when I am not as clean and well groomed as I could be.

23. I have always been courteous in my dealings with other people.

24. I have no feeling of hostility toward anyone.

25. I am grateful for everything given to me.

26. There are times when I have been a source of annoyance to other people.

27. As a friend, some people would find me disappointing.

28. I have always accepted misfortune without complaining.

29. If it were not for the fear of disapproval I would probably violate certain social conventions.

30. On more than one occasion, I have committed a spiteful act.

31. I have never been a slacker in my work.

32. I have never insulted anyone.

33. There are times when my thoughts are confused and disordered.

34. My personal wishes are sometimes contrary to the best interests of society.

35. I sometimes criticize another's actions because of the feeling of self-righteousness and superiority it gives me.

36. I sometimes do a good turn because of the praise or advantage it brings me.

37. I have sometimes corrected others only because they irritated me.

Social Problems

Problem I: "Natural Gas"

Natural gas, which is in great demand as a fuel, is obtained chiefly from the oil fields of the South and West. Ordinarily an oil company producing gas sells it to a transcontinental pipelind company which carries the gas to local gas companies. They, in turn, sell gas to consumers. Duplication of pipelines is an unnecessary expense. Once the pipelines are laid, the natural gas can be bought from only one source.

The price which consumers must pay for natural gas depends upon the prices charged by producers, pipeline companies, and local gas companies. In order to protect consumers, the government regulates the prices, and thus indirectly the profits, of pipeline companies and local gas companies. So far, the producers have made profits, but have sold gas at low prices. However, the government does not regulate the prices charged by producers. They may raise their prices and thus raise consumers' gas bills, if they wish to do so.

Many people fear that the producers will soon raise their prices and so raise consumers' gas bills. The producers, however, oppose government regulation. They claim that they keep their prices as low as reasonable profits will permit.

What should be done about this situation?

Course of Action:

1. 1. Producers of natural gas should be free to charge whatever price for gas they think best.
   2. Government should regulate the prices which producers of natural gas can charge.
   3. Producers of natural gas should co-operate in studying consumer prices and future demands for gas and develop plans for keeping gas prices low.

Reasons:

2. Most of the natural gas is produced by a few large oil corporations, some of which have opposed limitations on their prices.

4. If consumers are required to pay unreasonably high prices for gas, they will have less money with which to buy other needed goods and services.

6. Graft and red tape in the government make it almost impossible for businesses regulated by the government to make profits.

8. Since the government has not set up long term regulation of the prices of coal and oil, it is unfair to set up long term regulations of the price of gas.

10. Producers can not be depended upon to consider the interest of consumers when that interferes with their opportunity to make profits.

12. The owners of supplies of natural gas should be allowed to make as much profit as possible.

14. Corporations would not object to government regulation of prices, for they have already shown their willingness to continue low prices.

16. Natural resources like gas and oil are of such importance in our economic system that they should be owned by the federal government.

18. Businessmen complain that government regulations are more difficult to interpret and predict than the plans and reports drawn up by businesses themselves.

20. If profits are high, large dividends can be paid to the many thousands of stockholders.

22. Competition is the best method for keeping prices down.

24. Some regulation of the price of natural gas is necessary, but it should be done without interfering with the rights of private ownership.

26. Producers have been selling gas at prices which make its cost to consumers lower in most places than the cost of coal or oil.

28. Unrestricted power concentrated in the hands of large and irresponsible corporations makes it difficult to maintain an economic system where human welfare is of most importance.

30. Our economic system has been the kind in which businesses themselves have decided upon the prices at which they would sell their goods and services.

32. In the past, such public utilities as railroads and telephone companies, which had little competition, charged high or discriminating rates until the government regulated their charges.

34. The greatest economic progress comes when each company has a free hand in conducting its business.

36. Government regulation of business is an undemocratic interference with private enterprise.

38. It is the responsibility of government to protect the interests of the general public.

Directions:

Reread each statement in the list of reasons and for each odd number (from 3 to 39) on your answer sheet fill in space
4 if you believe that statement can be proved either true or false;
5 if you believe that statement can not be proved either true or false.

Problem II: "Public Opinion"

The local owner of a radio station in a western city gave notice to all of the stations' employees that they would be required to take loyalty oaths. Two employees who made up radio programs refused to do so. They said that they had never been members of the Communist party or any other subversive group, but that the owner had no right to require a loyalty oath as long as they performed their jobs competently. However, the owner fired both the employees.

A group of people in the city objected to the owner's action. They said that the radio station had no right to require loyalty oaths from competent employees. The group called a large public meeting to organize a campaign for the purpose of persuading the owner to rehire the two employees.

Many people were opposed to holding such a meeting. They believed that the two employees should not be defended or rehired. They claimed that if the employees were not Communists, they would be willing to take loyalty oaths. On the night of the meeting a large number of people picketed the meeting hall. When some of them tried to prevent people from entering the meeting, fighting broke out.

What should be done about such situations?

Courses of Action:

41. 1. Such groups should be allowed to meet and be furnished with as much police protection as may be necessary to protect them.

2. Such groups should be allowed to meet, but no efforts should be made to protect them.

3. Such meetings should be prohibited.

Reasons:

42. People should be forbidden to hold public meetings to

organize action which may result in the spread of Communist propaganda through the radio and the press.

44. There is little chance that any Americans will be persuaded by Communist propaganda to accept Communist policies.

46. Communists often object to such requirements as loyalty oaths on the grounds that they are being denied their rights as citizens.

48. The right of free speech and assembly has no reality unless those who wish to interfere with it are prevented from doing so.

50. Many ideas, like the popular election of Senators, which were opposed by most of the people in the United States seventy-five years ago are accepted by the majority of people today.

52. Communists in the United States have no right to freedom of speech as long as Russia does not allow freedom of speech.

54. Government, even in a democracy, must defend the existing political and economic system against attacks and criticism which result in action.

56. It is important to permit freedom of speech, but that does not involve providing protection to those who may spread anti-democratic ideas.

58. It is a principle of American law that a man is to be considered innocent until he is proved guilty.

60. Forbidding the expression of undemocratic ideas is the most practical way to safeguard democracy.

62. The opportunity to express ideas without interference should be protected only in the case of those ideas which commonly receive support from the American public.

64. If government in the United States prohibits free speech, the people of other nations will have evidence for doubting that the United States really supports democracy.

66. Since there is much to gain from criticism under a democratic system, any suppression of criticism would take away valuable opportunities for improvement.

68. People who object to taking loyalty oaths are Communists.

70. The policies of the Communist party in the United States follow the policies of a foreign power unfriendly to the United States.

72. Since one case of denying free speech and free assembly may

lead to others, everyone's right to freedom of speech and assembly should be protected.

74. Democracy is in danger when the government does not permit people to express their ideas.

76. Groups opposing Communism should be allowed to show their opposition by preventing a meeting at which sympathy for Communist policies may be expressed.

78. Suppressing ideas to which there is opposition would take away from the American people the right to decide for themselves what kind of democracy they want.

Directions:

Reread each statement in the list of reasons and for each odd number (from 43 to 79) on your answer sheet fill in space
4 if you believe that statment can be proved either true or false;
5 if you believe that statement can not be proved either true or false.

Problem III: "Employment of Negroes"

In a western city Negroes have never been appointed to city jobs. These jobs include positions for professional and skilled workers such as school teachers, office workers, health workers, engineers, firemen, and policemen, and positions for unskilled workers such as janitors, drivers, and manual laborers. About one-tenth of the population of the city are Negroes, and some of them have the training necessary for the professional and skilled positions. A group of local Negro and white citizens petitioned the city council to appoint some Negroes to city jobs. It was proposed that Negroes with the necessary ability and training be considered for the professional and skilled positions as well as unskilled positions. Many white people in town objected to this proposal.

What policy should be adopted in such a situation?

Courses of Action:

81. 1. Employ Negroes in any city jobs, professional, skilled, or unskilled, for which they have the necessary ability and training.

2. Continue to employ only white people in city jobs.

3. Employ Negroes in unskilled positions where they are not likely to have white people working under them.

Reasons:

82. Many cities throughout the nation have been employing Negroes in unskilled jobs for many years.

84. If the government sets an example by employing Negroes more often, it will help to establish a trend toward other employers' hiring Negroes.

86. Trying to end racial discrimination now is dangerous to the nation's welfare.

88. People should be appointed to jobs according to their ability and merit and not according to their race.

90. By limiting the types of jobs to which Negroes can be appointed, the city would be recognizing minority rights without antagonizing white people.

92. It is unfair to segregate Negro people in railroad trains, buses, hotels and schools.

94. It is only white people with low incomes and of low social status who discriminate against Negroes.

96. When Negroes are employed on an equal basis with white people, it is more difficult to keep the races apart.

98. The nation will be better off if white and Negro people work in any jobs where they can contribute most.

100. Throughout our history, the functions of government have been carried on by white people.

102. The number of Negroes qualified to hold better jobs is increasing.

104. Race prejudice cannot be done away with.

106. So long as the work is done efficiently by white people, it is unnecessary to appoint Negroes.

108. There are very few skilled and professional jobs open to Negroes.

110. The government ought to take some steps to see that there are more jobs available to Negroes.

112. Expecting white people to work under Negroes is carrying race tolerance too far.

114. Most Negroes have learned not to expect to work at the same jobs with white people.

116. Negroes are moving away from the southern farms on which the great majority of them formerly lived.

118. More job opportunities attract more Negroes to cities.

Directions:

Reread each statement in the list of reasons and for each odd number (from 83 to 119) on your answer sheet fill in space
4 if you believe that statement can be proved either true or false;
5 if you believe that statement can not be proved either true or false.

Problem IV: "Labor"

A large manufacturing company began the production of a new type of motor. After much study, the engineering department of the company had developed the production methods which it considered most efficient for getting highest output at lowest cost. The engineers had worked out the operations that each man was to perform either in making parts or in assembling them. They had also planned the speed at which the parts were to be made or put together.

After the new production methods went into effect, representatives of the workers made strong protests to the management. They complained that some work rates were too rapid, that some jobs were underpaid, and that some workers were unfairly transferred to less desirable jobs. They felt that the company's methods aimed at efficiency at the expense of its workers.

What should be done about this situation?

Courses of Action:

121. 1. The management and the workers should ask the government for an arbitrator to study production methods and to decide what is fair to both the company and the workers.

2. The management should consider suggestions about work rates, rest periods, work operations, and the like, from workers' committees set up by the management and the workers in each department of the plant.

3. The management should be free to use whatever methods of production they consider most efficient.

Reasons:

122. An outside person is in a better position to make a decision which protects the interests of the public as well as those of the company and the workers.

124. If both management and workers have a share in deciding on reasonable work rates and operations, decisions will be fairer in the long run to both the company and the workers.

126. During the last war disputes and even strikes occurred in plants where committees of top management and officials had been set up.

128. Workers cannot expect companies to negotiate with them until they get rid of the radicals and racketeers who cause labor trouble.

130. In big industrial plants, management and workers have few opportunities to develop the mutual understanding which promotes industrial peace.

132. Workers should be willing to accept the decisions about production methods made by those who are specially trained to decide such technical matters.

134. Efficient production should hot be achieved through the unfair treatment of workers.

136. In the past, improvements in industrial working conditions have come almost always from government influence.

138. Efficiency and economy should be the most important consideration in industry.

140. When the production output of workers is low, their wages must also be low.

142. Over the past fifty years, the quantity and quality of goods produced has been increased without relying upon the suggestions of workers or government.

144. The public has a right to expect management and workers to avoid the ill will that leads to strikes, by co-operatively solving industrial problems.

146. Output has been raised where workers were asked to help in planning the specific jobs they were to do.

148. Since the worker is dependent on industry, anything which helps business will, over a period of years, be of advantage to workers.

150. Government regulation of wages and hours, working conditions, and collective bargaining has been of benefit to the public, labor, and business.

152. Industry's responsibility to its stock holders means that the cost of production must be kept as low as possible.

154. The prices charged other companies for motors will affect their profits, wages, and prices.

156. When workers develop confidence in and respect for management, businesses lose less money on labor turnover.

World Cultures Test

Directions: For each of the following items, read the paragraph and statement. Choose the one best completion and fill in the appropriate space on the answer sheet.

1. To this isolated, tightly closed family circle, new ideas will have a hard time penetrating from the outside. Inside the family the emphasis must be on learning the old wisdom from one's elders and teaching it to one's young. Every child in the band has only the same models to imitate, for all the adults practice the same techniques of gaining a livelihood and follow exactly the same social customs.

This paragraph is descriptive of
(1) a society in transition
(2) cultural diffusion
(3) a folk society
(4) a nomadic society.

2. On the western plains men sought visions with physical tortures. They cut strips from the skin of their arms, they struck off fingers, they went without food and water for extreme periods. Sometimes, in other tribes, men wandered over distant regions far out into dangerous country. At all events a man went alone, or, if he was seeking his vision by torture, and someone had to go out with him to tie him to a pole, his helper did his part and left him alone for his ordeal.

This paragraph is descriptive of the Indians'
(1) backwardness
(2) attempt to have a supernatural experience
(3) attempt to punish himself
(4) inability to share his experience with another.

3. When Kridlarssuark and his companions had been royally welcomed by the hospitable northerners and had settled down among them and been adopted by the village, he discovered that these long lost cousins did not have the bow and arrow and that they did not hunt the many reindeer that abounded in their country because they did not consider the meat fit for human consumption. Kridlarssuark and his companions soon set about proving that the flesh of the reindeer was wholesome food, and that the eating of this land animal need not offend the spirits of the sea animals if the two kinds of meat were kept apart. They taught the Polar Eskimos how to copy their own bows and their own small flint-tipped arrows.

This paragraph is descriptive of
(1) folk societies
(2) cultural adaptation
(3) cultural determinism
(4) cultural diffusion.

4. A shaman is one who

(1) acts as a judge
(2) presides over communal ceremonies
(3) diagnoses and cures individuals
(4) leads tribal battles.

5. Toki found that this climate was harsher than that of his tropical homeland, with a different plant and animal life. Here the houses were stronger, people wove their cloth out of wild flax instead of mulberry bark and instead of feeding on breadfruit, bananas and coconuts, they were "wood eaters."

This paragraph describes the effect of
(1) the physical environment on the development of culture
(2) a tropical climate on the attitudes that Toki expressed
(3) eating fruits and wearing cloth made from mulberry bark
(4) a strange environment on how people feel.

6. In the private dealings of the Hopis and in their conduct of village affairs, nothing is so frowned upon as agitation and heat--combativeness, self-assertion, envy, jealousy, quarrelsomeness, personal ambition, loud argument. The worst fault is to offend one's neighbor.

This paragraph demonstrates
(1) the weak and shy character of the Hopi
(2) the Hopi view of what is bad
(3) the good relationship that exists between neighbors
(4) the Hopi way of expressing himself.

7. Item 6 above is an example of a society's

(1) values
(2) religious conviction
(3) socialization
(4) status system.

8. Ple and his sister Simei lived among the Semand for many years, and Simei gave light to the fireflies so that they might accompany her by night when she visited sick Semang women. Since Ple and Simei have gone, the fireflies keep seeking for them among the bushes, and that is why no Semang will ever harm a firefly.

This is an example of a
(1) ritual
(2) value
(3) taboo
(4) primitive science.

9. The Hopi girl went before dawn to the household of her father's eldest sister. She stayed four days, avoiding the sun, eating no salt or meat, and, from dawn to dark, grinding corn.

After four days of this backbreaking toil, she went out on the mesa edge and offered her corn meal to the rising sun, praying for strong arms to grind corn, strong legs to climb up and down the mesa path for water, and luxuriant hair for beauty. She returned to her father's sister's house for the women's feast to be held in her honor.

This paragraph describes what each girl in the Hopi tribe does
(1) to test her physical strength and endurance
(2) to prepare her for her duties as a woman
(3) to please the supernatural spirits of the Hopi people
(4) to establish an obedient relationship between the girls and women.

10. Item 9 above is an example of a society's

(1) taboos
(2) religious dogma
(3) rites of passage
(4) kinship structure.

11. Youth grants the aged neither greater wisdom nor greater prowess. They vote them richer and therefore in the saddle.

This is an example of youth's
(1) taboos
(2) values
(3) importance
(4) status.

12. The first man on the Andaman Islands was Jutpu. He was born inside the joint of a big bamboo, just like a bird in an egg. The bamboo split and he came out. He was a little child. When it rained he made a small hut for himself and lived in it. He made little bows and arrows. As he grew bigger, he made bigger huts and bigger bows and arrows. Jutpu was lonely, living all by himself. He took some clay from a nest of the white ants and molded it into the shape of a woman. She became alive and became his wife. Afterwards Jutpu made other people out of clay. These were the ancestors. Jutpu taught them how to make canoes, bows and arrows, and how to hunt and fish. His wife taught the women how to make baskets and nets and mats and belts, and how to use clay for making patterns on the body.

This is an example of
(1) how man came to be on the Andaman Islands.
(2) Andamanese social organization
(3) how Andamanese culture started
(4) Andamanese myths and legends.

Directions: Read the following passage. Write an essay describing what you have inferred about the nature of the economy, the social relationships and the beliefs and values of the people in this society. You may take 20 minutes to do this.

There was a fire in the center of the hogan, under the smoke hole, and behind it sat the bride and groom--she at the north and he at the south. Firelight played on silver necklaces, earrings and bracelets; for the bride, the groom and their families were decked out in all the wealth they owned or could borrow. Each family was ranged at the side of its child, in blouses of purple, crimson and orange, dark eyes glinting as bright as their silver earrings. The act of union was the sharing of a bowl of corn mush, the standard food. Across the top of it there was a cross which had been made in corn pollen--a sign of fertility--by an old man, especially chosen for his virtuous life. Facing the east, the bride put her fingers into the bowl of mush and ate a little of it. The groom followed suit. Next, each of them ate while facing the south, then the west, then the north--she first and he following. That was the wedding ceremony which made them one. When it was finished, all the guests ate from bowls of mutton provided by the bride's family. Then there were speeches, instructing the young people how to behave and telling the bride she must always cook for her husband and see that he was well fed.

Directions: Read the following paragraphs. Write an essay describing what you have inferred about the nature of the economy, the social relationships and the beliefs and values of the people in this society. You may take 20 minutes to do this.

Mr. Charles Watson, the superintendent in the cemetery, squatted on his haunches while he supervised the pick-and-shovel activities of his two workmen. The burial lot where these operations were proceeding was down on the flat ground ih one corner of the cemetery. The headpieces were stone and rather small. Next to and just below this flat part of the cemetery was the area of wooden headpieces. Many of them had fallen and lay rotting on the ground. On the other side of the cemetery, the stone headpieces were larger and increased in size until they reached the hill section where there were some elaborate funeral urns. In this area a whole burial lot was often bordered with white marble.

The shoveler stopped his work and lit a cigarette.
"I can't understand that guy," he said. "Why can't Phil Starr leave his old man and old lady rest in peace? Why, they've been down in this here grave for thirty years, and now he's digging them up and running all over town with them. I say, once they're buried, let them stay buried."

"I think you aren't seeing this thing right," said the superintendent. "Mr. Starr is only showing his love for his father and mother. When they were alive he had yet to make his money, and he was unable to do the things for them he would have liked. If he had had the money when they were alive, he told me, he would have moved them out of that little shack they had down there in the flats and up to his house on Hill Street. That's natural. Anyone who's worth his salt would want to do that for his pa and ma, especially when he's able to do it. But you see, they died too soon.

"He told me just the other day he wanted to give them the best place to rest in that could be found in the cemeteries in this town. I tried to show him one of our better lots up on the hill but 'no,' he said, 'only Elm Hill Grove will do.' He's putting them in a grave up there on the highest hill next to the Breckenridges and the Wentworths and all of those other old families. It's going to be his own lot. He's a-doing this for his pa and ma. Just what any decent person would do for his."

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